



SPIE[®]

2013 Optics+ Optoelectronics

15-18 April 2013

Technical Programme

www.spie.org/oo

Location

Clarion Congress Hotel
Prague, Czech Republic

Conference

15-18 April 2013

Exhibition

16-17 April 2013

2013 Optics+ Optoelectronics



General Chairs:



Jiri Homola

Institute of Photonics
and Electronics of the
ASCR, v.v.i.,
Czech Republic



Chris Edwards

Central Laser Facility,
Science and Technology
Facilities Council,
United Kingdom



Mike Dunne

Lawrence Livermore
National Lab.,
United States



Ivo Rendina

CNR/Istituto per la
Microelettronica e
Microsistemi, Italy

Honorary Chair:



Miroslav Miler

Institute of Photonics
and Electronics of the
ASCR, v.v.i.,
Czech Republic

Welcome to this meeting showcasing
the latest research and technology
developments.

MORE THAN 600 PRESENTATIONS ON:

- Metamaterials
- Nonlinear Optics
- Photon Counting Quantum Optics
- Optical Sensors
- Optical Fibres Holography
- VUV, EUV and X-ray Optics
- X-ray Free-Electron Lasers
- High-Energy and High-Power Lasers
- Laser Acceleration of Electrons, Protons, and Ions
- NEW! Integrated Optics: Physics and Simulations

Co-Sponsoring Organisation:



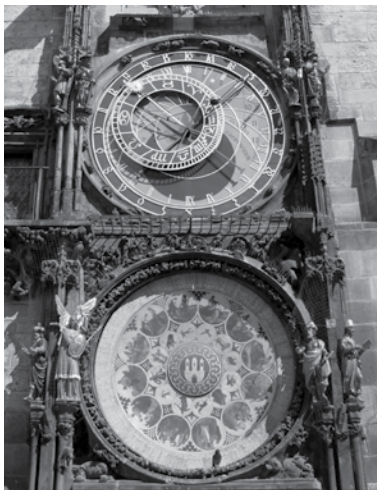
Co-Operating Organisations:



INTERNATIONAL COMMISSION FOR OPTICS
COMMISSION INTERNATIONALE d'OPTIQUE

Promotional Partner:

Electro Optics Magazine



Managed by SPIE Europe

SPIE Europe Ltd., a subsidiary of SPIE, is a not-for-profit UK-registered company serving SPIE constituents throughout Europe as an advocate and liaison to political and industry associations within the European optics and photonics community.

In addition to providing membership services, SPIE Europe Ltd. organises and manages internationally recognised conferences, education programmes, and technical exhibitions featuring emerging technologies in optics and photonics.

SPIE Europe
2 Alexandra Gate
Fordd Pengam, Cardiff, CF24 2SA
Tel: +44 29 2089 4747
Fax: +44 29 2089 4750
info@spieeurope.org

Contents

Clarion Congress Hotel Floorplan	2
Daily Schedule.	3
Plenary Session.	4-5
Special Events.	6-8
Exhibition Guide	9-12

Technical Conferences

WS100 Laser Energy Workshop	13
8771 Metamaterials VIII.	15
8772 Nonlinear Optics and Applications VII	18
8773A Photon Counting Applications IV	21
8773B Quantum Optics and Quantum Information Transfer and Processing	22
8774 Optical Sensors 2013	23
8775 Micro-structured and Specialty Optical Fibres II	26
8776 Holography: Advances and Modern Trends III	28
8777A Damage to VUV, EUV, and X-ray Optics IV.	30
8777B EUV and X-ray Optics: Synergy between Laboratory and Space III	32
8778 Advances in X-ray Free-Electron Lasers II: Instrumentation	34
8779A Laser Acceleration of Electrons, Protons, and Ions II.	37
8779B Medical Applications of Laser-Generated Beams of Particles II: Review of Progress Made in Recent Years.	40
8779C Harnessing Relativistic Plasma Waves as Novel Radiation Sources from Terahertz to X-rays and Beyond III.	42
8780A High-Power, High-Energy, and High-Intensity Laser Technology.	43
8780B Research Using Extreme Light: Entering New Frontiers with Petawatt-Class Lasers	45
8781 Integrated Optics: Physics and Simulations.	47
Index of Authors, Chairs, and Committee Members.	50-56
General Information.	57-60
Proceedings of SPIE	60

Steering Committee

- Miroslav Hrabovský**, Univ. Palackého v Olomouci, Czech Republic
- Alan Michette**, King's College London (United Kingdom)
- Bedrich Rus**, Institute of Physics, ASCR v.v.i. and ELI Beamlines, Czech Republic
- Wolfgang Sandner**, Max-Born-Institut (Germany) and Laserlab Europe
- Pavel Tománek**, Brno Univ. of Technology, Czech Republic

SPIE would like to express its deepest appreciation to the symposium chairs, conference chairs, programme committees, session chairs, and authors who have so generously given their time and advice to make this symposium possible.

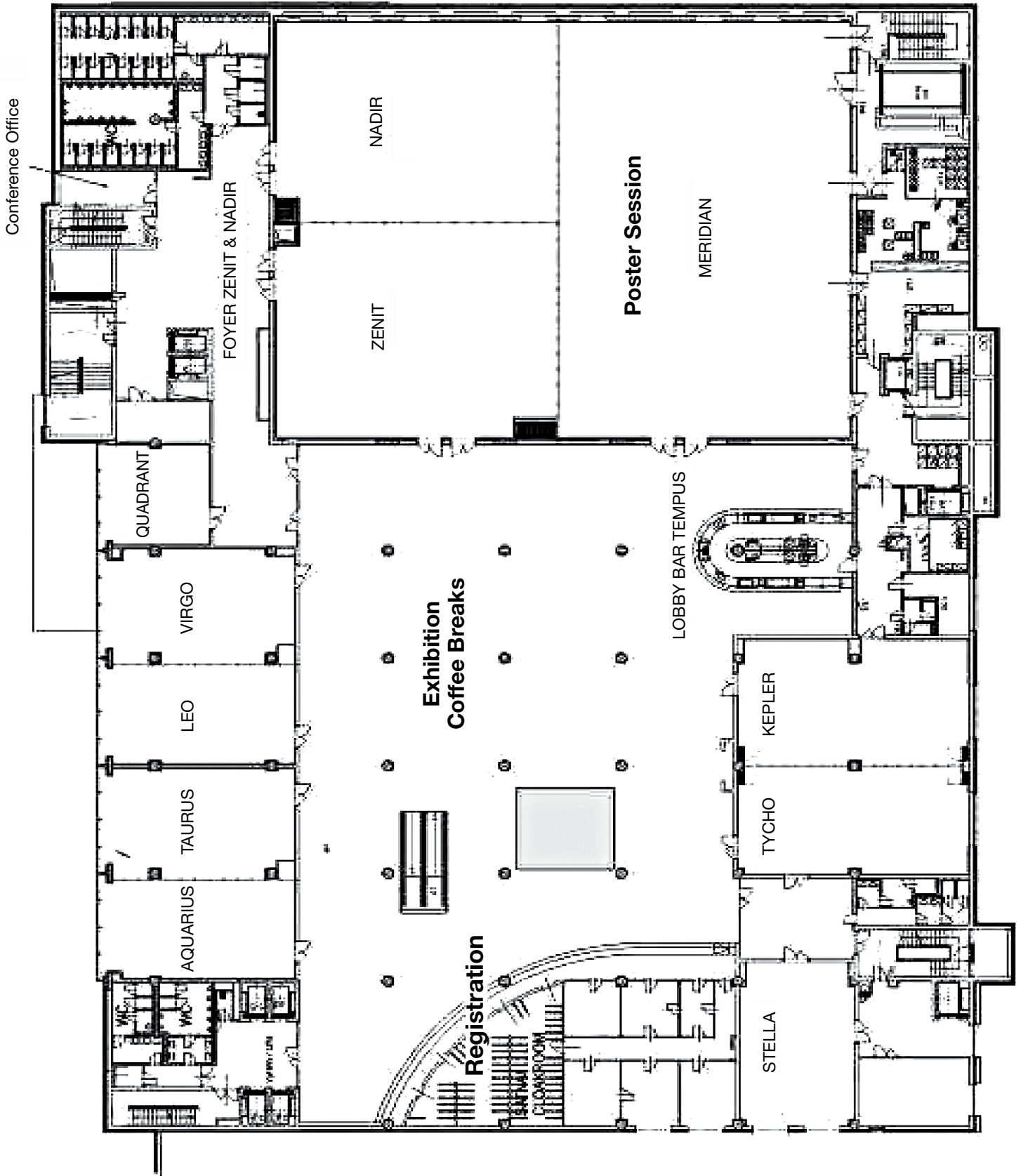
The symposium, like our other conferences and activities, would not be possible without the dedicated contribution of our participants and members. This programme is based on commitments received up to the time of publication and is subject to change without notice.

Technical Committee

- Saša Bajt**, Deutsches Elektronen-Synchrotron (Germany)
- Francesco Baldini**, Istituto di Fisica Applicata Nello Carrara (Italy)
- Mario Bertolotti**, Univ. degli Studi di Roma La Sapienza (Italy)
- Paul Bolton**, Japan Atomic Energy Agency (Japan)
- Mike Dunne**, Lawrence Livermore National Lab. (United States)
- Chris Edwards**, Central Laser Facility, Science and Technology Facilities Council, United Kingdom
- Eric Esarey**, Lawrence Berkeley National Lab. (United States)
- Antonio Fimia-Gil**, Univ. Miguel Hernández de Elche (Spain)
- Jaromír Fiurášek**, Univ. Palackého v Olomouci (Czech Republic)
- Joseph W. Haus**, Univ. of Dayton (United States)
- Joachim Hein**, Friedrich-Schiller- Univ. Jena (Germany)
- Jiri Homola**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)
- Miroslav Hrabovský**, Univ. Palackého v Olomouci (Czech Republic)
- René Hudec**, Astronomical Institute of the ASCR, v.v.i. and Czech Technical Univ. in Prague (Czech Republic)
- Dino A. Jaroszynski**, Univ. of Strathclyde (United Kingdom)
- Libor Juha**, Institute of Physics of the ASCR, v.v.i. (Czech Republic)
- Kyriacos Kalli**, Cyprus Univ. of Technology (Cyprus)
- Jiri Kanka**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)
- Georg Korn**, ELI Beamlines, Institute of Physics of the ASCR, v.v.i. (Czech Republic)
- Vladimir Kuzmiak**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)
- Kenneth W. D. Ledingham**, Univ. of Strathclyde (United Kingdom)
- Wim P. Leemans**, Lawrence Berkeley National Lab. (United States)
- Robert A. Lieberman**, Intelligent Optical Systems, Inc. (United States)
- Richard A. London**, Lawrence Livermore National Lab. (United States)
- Peter Markos**, Slovak Univ. of Technology (Slovakia)

- Paul McKenna**, Univ. of Strathclyde (United Kingdom)
- Miroslav Miler**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)
- Ladislav Pina**, Czech Technical Univ. in Prague (Czech Republic)
- Ivan Prochazka**, Czech Technical Univ. in Prague (Czech Republic)
- Ivo Rendina**, CNR/Istituto per la Microelettronica e Microsistemi (Italy)
- John T. Sheridan**, Univ. College Dublin (Ireland)
- Roman Sobolewski**, Univ. of Rochester (United States)
- Luis O. Silva**, Univ. Técnica de Lisboa (Portugal)
- Carl Schroeder**, Lawrence Berkeley National Lab. (United States)
- Klaus Spohr**, Univ. of the West of Scotland (United Kingdom)
- Tomasz Szoplik**, Univ. of Warsaw (Poland)
- Kai Tiedtke**, Deutsches Elektronen-Synchrotron (Germany)
- Thomas Tschentscher**, European XFEL GmbH (Germany)
- Alexei M. Zheltikov**, Lomonosov Moscow State Univ. (Russian Federation)

Clarion Congress Hotel Floorplan



MONDAY	TUESDAY	WEDNESDAY	THURSDAY
Conferences			
		Conf. 8771 Metamaterials p. 15	
	Conf. 8772 Nonlinear Optics and its Applications p. 18		
	Conf. 8773B Quantum Optics and Quantum Information Transfer and Processing p. 22	Conf. 8773A Photon Counting Applications p. 21	
Conf. 8774 Optical Sensors p. 23			
	Conf. 8775 Photonic Crystal Fibres p. 26		
	Conf. 8776 Holography: Advances and Modern Trends p. 28	Conf. 8777B EUV and X-ray Optics: Synergy between Laboratory and Space p. 32	
	Conf. 8777A Damage to VUV, EUV, and X-ray Optics p. 30	Conf. 8778 Advances in X-ray Free-Electron Lasers: Radiation Schemes, X-ray Optics and Instrumentation p. 37	
	Conf. 8779A Laser Acceleration of Electrons, Protons and Ions p. 37		Conf. 8779B Medical Applications of Laser Generated Beams of Particles: Review of Progress Made in Recent Years p. 40
	Conf. 8780A Diode-Pumped High Energy and High Power Lasers p. 43		
		Conf. 8779C Harnessing Relativistic Plasma Waves as Novel Radiation Sources from Terahertz to X-rays and Beyond p. 42	
	Conf. 8780B ELI: Ultrarelativistic Laser-Matter Interactions and Petawatt Photonics p. 45		
		Conf. 8781 Integrated Optics: Physics and Simulations p. 47	
Special Events			
Plenary Session	ICO Awards Ceremony p. 6	ELI: Prospective Users Workshop p. 6	
Welcome Reception p. 6		Laser Energy Workshop p. 6	
		Poster Session p. 6	NSF Workshop: US-Czech Frontier in Photonics p. 6
	2013 SPIE Optics + Optoelectronics Exhibition		

Plenary Session • Room: Nadir

Monday 15 April • 8:50 to 12:30

8:50 to 9:00

Opening Remarks

Jiri Homola, Institute of Photonics and Electronics of the ASCR, v.v.i., Czech Republic

Chris Edwards, Central Laser Facility, Science and Technology Facilities Council, United Kingdom

Mike Dunne, Lawrence Livermore National Lab., United States

Ivo Rendina, CNR/Istituto per la Microelettronica e Microsistemi, Italy

9:00 to 9:30

Welcome Address



Tomas Hruda, Deputy Minister, Higher Education, Science and Research, Ministry of Education, Youth and Sports, Czech Republic

9:30 to 9:35

Introduction of Speakers

Jiri Homola, Institute of Photonics and Electronics of the ASCR, v.v.i., Czech Republic

Chris Edwards, Central Laser Facility, Science and Technology Facilities Council, United Kingdom

9:35 to 10:20

National Ignition Facility: Status and Future Plans



Ed Moses, Principal Associate Director National Ignition Facility (NIF) & Photon Science, Lawrence Livermore National Lab, United States

The National Ignition Facility (NIF), the world's largest and most energetic laser system, is now operational at Lawrence Livermore National Laboratory. The NIF's 192 beams are capable of delivering 1.8-megajoule, 500-terawatt, ultraviolet laser light, over 60 times more energy than any previous laser system. The NIF can create temperatures of more than 100 million degrees and pressures more than 100 billion times Earth's atmospheric pressure. These conditions, exceeding those at the center of the sun, have never before been created in the laboratory. This facility is designed to compress fusion fuel to the conditions required for "ignition", liberating more energy than is required to initiate the fusion reaction. Success will mark the culmination of over 50 years of research and development. This talk will discuss the current status of the program to achieve ignition, presenting the most recent experimental results.

The talk will then briefly discuss an approach to generating gigawatt levels of electrical power from such a laser-driven source of fusion neutrons based on these demonstration experiments. This approach is known as Laser Inertial Fusion Energy - or LIFE. Such a source is attractive because it will be inherently safe, generate no greenhouse gases or other environmental pollutants, provide security of fuel supply to all nations, use fuel that will last for millennia, deliver large-scale baseload electricity generation, make use of the existing grid, have no need for geological waste disposal (unlike nuclear power or carbon sequestration), and will not require enrichment or reprocessing of nuclear material that could present a proliferation risk.

Fusion has, of course, been studied in the laboratory for many years. But the potential to create a net source of power has only recently been made possible - with the completion of the National Ignition Facility. This has enabled detailed design of the subsequent LIFE power plant, guided by a team of executives from the power utility industry working with scientists from across the US and internationally.

Biography: **Dr. Edward Moses** has 18 years of experience developing Department of Energy/National Nuclear Security Administration (DOE/NNSA) laser systems and 30 years of experience developing and managing complex laser systems and high-technology projects. As associate director (AD) for the National Ignition Facility (NIF) Program from 2005 to 2007 and now as principal associate director for the NIF & Photon Science Directorate, he is responsible for completing construction and bringing into full operation the world's largest optical instrument for achieving ignition in the laboratory and for studying inertial fusion energy. He has been instrumental in sustaining the program's current strong performance.

Dr. Moses joined Lawrence Livermore Laboratory in 1980, becoming program leader for isotope separation and material processing and deputy AD for Lasers. From 1990 to 1995, he was a founding partner of Advanced Technology Applications, Inc., which advised clients on proposing and designing high-technology projects. He returned to LLNL in 1995 as assistant AD for program development, physics, and space technology.

Dr. Moses received his bachelor's degree and doctorate from Cornell University in New York. He has won numerous awards, including the 2003 NNSA Award of Excellence for Significant Contribution to Stockpile Stewardship, the 2004 DOE Award of Excellence for the first joint LLNL/Los Alamos National Laboratory experiments on NIF, and the D.S. Rozhdestvensky Medal for Outstanding Contributions to Lasers and Optical Sciences. He holds seven patents in laser technology and computational physics.

Coffee Break: 10:20 to 10:45

10:45 to 11:30

Silicon Photonics: a Generic Technology Platform for Innovation in Many Markets



Roel Baets, Ghent Univ. and IMEC, Belgium

Since the beginning of this century silicon photonics has emerged as a prominent technology platform for high data-rate transceivers for use in optical interconnect, active optical cables and other data-communication applications. The fact that silicon photonics largely builds on existing technologies in advanced CMOS fabs proves to be an enormous lever for the rapid scientific progress in this field as well as for the rapid development of an industrial supply chain. Furthermore the ease by which high index contrast nanophotonic concepts can be exploited in this technology has led to remarkable scientific achievements as well as the potential of high density large scale integration.

The market potential of silicon photonics is not limited to data-communication but also extends to other medium- to high-volume markets.

Disposable bio-sensing chips have been demonstrated with record detection limits and are already close to commercial deployment. More generally the technology can be used in many lab-on-chip applications as well as in biomedical applications. The strong temperature dependence of silicon photonic devices can be exploited in power-efficient switches, tuning devices and beam scanners. While standard silicon photonic devices can only be used in the transparency window of silicon and siliconoxide - roughly from 1 to 4 micrometer - CMOS-compatible variations of the same technology are now being explored both for shorter bands, including the visible, as well as the wider mid-infrared range. This opens up exciting opportunities for absorption spectroscopy and Raman spectroscopy on a chip.

Biography: **Roel Baets** is full professor at Ghent University, Belgium. He is also associated with IMEC. He has held part-time professor positions at the Technical University of Delft and at the Technical University of Eindhoven. Roel Baets works in the field of integrated photonic components and circuits. He has made contributions to research on semiconductor laser diodes, guided wave and grating devices and to the design and fabrication of photonic ICs, both in III-V semiconductors, in silicon and in siliconnitride. The Photonics Research Group, in which he is active, is involved in numerous national and international research programs and also coordinates the Multi-Project-Wafer service ePIXfab that provides access to silicon photonics technology. The silicon photonics research activities of the group are part of a joint research initiative with IMEC.

Roel Baets holds management responsibilities within the Photonics Research Group and the Center for Nano- and Biophotonics (NB Photonics) Ghent University. He was co-founder of the international European MSC programme in Photonics.

Roel Baets is a grant holder of the Methusalem programme of the Flemish government and of the European Research Council (ERC). He is a Fellow of the IEEE.

11:30 to 12:15

Nanoplasmonic antennas for spectroscopy and sensing



Mikael Kaell, Chalmers Univ. of Technology, Div. of Bionanophotonics, Sweden

Nobel metal nanostructures are well known for their exceptionally bright and tunable colors originating in surface plasmon resonance (SPR) oscillations of the conduction-electron density. The SPR phenomenon is of high current interest in a range of fields, spanning from solar energy harvesting to metamaterials. Here I will

review some of our recent work in this area, focusing on the possibility to use metal nanoparticles as optical antennas for molecular sensing and spectroscopy. Topics to be discussed include directional plasmonic antennas based on bimetallic particle dimers and nano wires, SPR biosensors based on plasmonic nanoparticle arrays, surface-enhanced Raman scattering from individual nano antennas and optical manipulation of plasmonic nano structures .

Biography: **Mikael Käll** is professor of physics at Chalmers University of Technology, Göteborg, Sweden, where he leads the Bionanophotonics research division. He is well known for his contributions to the plasmonics field, where he has worked on topics like single molecule SERS, surface plasmon resonance sensing, the optical properties of various plasmonic nanostructures and laser manipulation of metal nanoparticles.

Special Events

Welcome Reception

Monday 15 April, 18:30 to 20:30

All attendees are invited to relax, socialise, and enjoy light refreshments. Please remember to wear your conference registration badges. Dress is casual.

Directions - Two Options:

1. Take metro B from VYSOCANSKA (station is located just at the Clarion Congress Hotel) and go eight stops to NARODNI TRIDA. There change for tram No. 22 and go to the station BREVNOVSKY KLASTER:
Time required: 45 minutes
2. Take metro B from the station VYSOCANSKA (station is located just at the Clarion Congress Hotel), go two stops to Palmovka. There change for tram No. 25 and go to the station BREVNOVSKY KLASTER.
Time required: 42 minutes

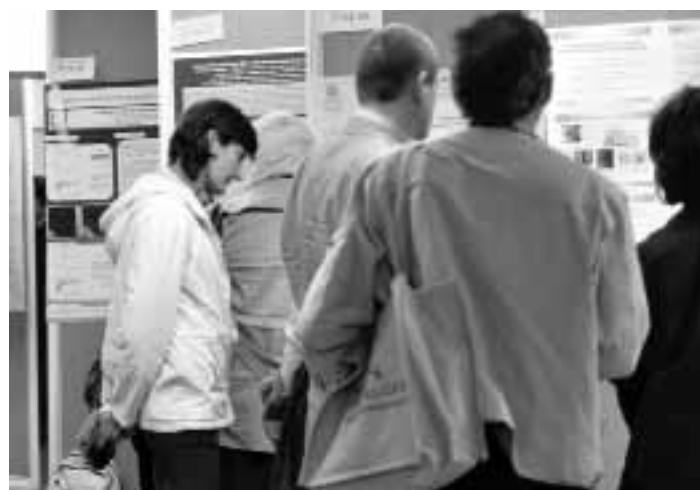
ICO Awards Ceremony

Tuesday 16 April, 17:45 to 20:00

Room: Nadir

ICO, the International Commission for Optics awards annually the "ICO Prize", the ICO Galileo Galilei Award and the IUPAP Prize in Optics.

The International Commission for Optics was created in 1947. It is an Affiliated Commission of the International Union of Pure and Applied Physics (IUPAP), and a Scientific Associate of the International Council of Science (ICSU). Its objective is to contribute, on an international basis, to the progress and diffusion of knowledge in the field of optics.



Poster Session

Wednesday 17 April, 17:40 to 19:15

Meridian Hall

All symposium attendees are invited to attend the Wednesday poster session to enjoy networking and refreshments while reviewing poster papers. The interactive poster sessions are designed to promote opportunities for networking with colleagues in your field. Attendees are encouraged to review the high-quality papers that are presented in this alternate format and to interact with the poster authors.

Poster presenters may post their papers starting at 10:00 hrs on Wednesday in the Conference Area Hallway. Any papers left on the boards following the end time of the poster session will be considered unwanted and will be discarded. SPIE assumes no responsibility for posters left up after the end of the poster session. Poster authors should be at their papers from 17:40 to 19:15 hrs to answer questions from attendees. Attendees are requested to wear their conference registration badges to the poster sessions.

2013 SPIE Optics + Optoelectronics Exhibition

Exhibition Dates and Hours:

Tuesday 16 April, 10:00 to 17:00

Wednesday 17 April, 10:00 to 16:00

Where research, technology and industry meet. The exhibition gives you the opportunity to make connections with suppliers and project partners from around the world in these areas:

Optical components; Lasers and light sources; Lenses and coatings; Optical sensors and fiber sensors; Custom optics; Materials and chemicals; Metrology and testing equipment; Nano- and microtechnology; X-ray optics and devices; Optoelectronic components and systems

For further details including the exhibit floor plan and exhibitor list, visit our web site at www.spie.org/ooexhibit

ELI: Prospective Users Workshop

Wednesday 17 April, 13:30 to 17:00

Thursday 18 April, 9:00 to 17:00

Room: Taurus

The main goal of this workshop is to bring together researchers developing and building the ELI Beamlines facility with members of the community of prospective users of proposed beamlines and end-stations. The ELI Beamlines will provide ultra-short high-energy laser pulses for the generation and applications of ultra-short pulsed energetic photons and accelerated particles emitted by various laser-driven secondary sources. The laser systems will be delivering Vis/NIR laser pulses with a length ranging between 10 and 150 fs and will provide high-energy Petawatt and 10-PW peak powers. Numerous pump-probe experiments are planned to be conducted with a pump pulse delivered by secondary sources of ionizing radiation (e.g., K-alpha/plasma sources, high-order harmonics, betatron sources, soft x-ray lasers, free-electron lasers based on a laser-produced e-beam, and sources of energetic charged particles) driven by the above-mentioned ultra-intense laser beams whose part is used as a probe pulse. In the first two sessions of the Workshop, speakers will inform participants on the secondary sources, beamlines, and endstations planned to be built and operated at the ELI Beamlines facility. The second day of the Workshop would offer numerous talks presented to trigger a discussion on promising scientific applications of these advanced tools in various research areas, e.g., biophysics and biomedicine, molecular and materials sciences, high-energy-density and plasma physics, high-field physics, and so on. Several round tables will be held at the Meeting to identify and specify the most promising user experiments.

Laser Energy Workshop

Wednesday 17 April, 9:00 to 17:00

Thursday 18 April, 9:00 to 17:30

Room: Tycho

Laser Energy, based on repetitively pulsed fusion of inertially confined D-T fuel capsules is one of the few potential solutions to closing the gap between global energy demand and supply. Along with magnetic fusion energy (MFE) and advanced "Gen IV" fission reactors, laser energy avoids damaging environment and provides long term security of energy supply, addressing the need for substantial increase in baseload capacity.

The LIFE (US) and HiPER (Europe) projects have been conceived as the response to the anticipated achievement of "first ignition" at the National Ignition facility (NIF), identifying the concept of the prototype demonstration power plants required to prove the commercial viability of Laser Energy.

The Workshop emphasizes the engagement with industry as an important element of the Laser Energy roadmap, both in a facility delivery context and also as assurance that arising technological advances are exploited for shorter term economic impact, along with discussion of the key enabling technologies and the underlying physics of laser-driven fusion and progress to "first ignition" at NIF.



National Science Foundation (NSF) Workshop on “US - Czech Frontiers in Photonics”

Thursday 18 April, 7:50 to 18:50 • Room: Kepler

Chair: **Henry Du**, Stevens Institute of Technology (United States)

Co-Chair: **Jirí Homola**, Institute of Photonics and Electronics (Czech Republic)

Bringing together leading American, Czech and European academic researchers in photonics research and development to explore the next frontiers.

7:50 to 8:30: **Welcome and Introduction**

7:50: **Opening remarks and workshop objectives**

Henry Du, Stevens Institute of Technology (United States)

Jirí Homola, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

8:00: **Presentation by NSF**

8:15: **Presentation by Grant Agency of the Czech Republic (GACR)**

8:30 to 8:10: **Nonlinear Optics**

Speakers & Discussion

Joseph Haus, Univ. of Dayton (United States)

Pavel Honzátko, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

9:10 to 10:50: **EUV – Soft X-rays**

Speakers & Discussion

Michaela Kozlová, Institute of Physics of the ASCR, v.v.i. (Czech Republic)

Carmen Menoni, Colorado State Univ. (United States)

10:50 to 11:10: *Coffee Break and Student Poster Session*

11:10 to 11:50: **Non Micro-structured and Specialty Optical Fibres**

Speakers & Discussion

Yoel Fink, Massachusetts Institute of Technology (United States)

Jiri Kanka, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

11:50 to 12:30: **Optical Sensors**

Speakers & Discussion

Jirí Homola, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

Miriam Deutsch, Univ. Oregon (United States)

12:30 to 13:30: *Lunch Break*

13:30 to 14:10: **Non Optical Manipulators**

Speakers & Discussion

Ken Crozier, Harvard Univ. (United States)

Pavel Zemánek, Institute of Scientific Instruments of the ASCR, v.v.i. (Czech Republic)

14:10 to 14:50: **Metamaterials**

Speakers & Discussion

Lukáš Jelínek, Czech Technical Univ. in Prague (Czech Republic)

Rashid Zia, Brown Univ. (United States)

14:50 to 15:10: *Coffee Break and Student Poster Session*

8:30 to 8:10: **Terahertz Photonics**

Speakers & Discussion

Ted Norris, Univ. of Michigan (United States)

Petr Kužel, Institute of Physics of the ASCR, v.v.i. (Czech Republic)

8:30 to 8:10: **Mid-IR Photonics**

Speakers & Discussion

Helena Jelínková, Czech Technical Univ. in Prague (Czech Republic)

Dan Wasserman, Univ. of Illinois (United States)

17:10 to 17:20: **Closing Remarks**

17:30 to 18:30: **Reception**

ICO AWARDS CEREMONY

Tuesday 16 April, 17:45 to 20:15 • Room: Nadir

ICO, the International Commission for Optics awards annually the "ICO Prize", the ICO Galileo Galilei Award and the IUPAP Prize in Optics.

Welcome and Introduction

Angela M. Guzmán, ICO Secretary, College of Optics and Photonics CREOL, University of Central Florida, United States

Presentation of the 2011 ICO Galileo Galilei Award to Prof. Jan Perina, Palacký Univ., Czech Republic

The ICO Galileo Galilei Award is awarded to researchers in the area of optics and photonics for outstanding contributions achieved under comparatively unfavourable circumstances.



Jan Perina is professor of quantum electronics and optics at the Department of Optics, Palacký University, Olomouc, Czech Republic. awarded Perina the 2011 Galileo Galilei Award "for his impressive results on quantum optics and coherence regarding non-classical states achieved under difficult circumstances". The committee considered it impressive how he could make so much work in the difficult conditions existing in Czechoslovakia during the years of his maximum activity.

His research papers and books, especially the original Coherence of Light (published 1972), have served as a major source of information and educational inspiration for generations of scientists and students. While the Czech Republic no longer qualifies as a developing nation, much of Perina's contributions saw the light of day when his institution in Olomouc was still part of the old Czechoslovakia, i.e. under unfavourable conditions.

Perina was elected fellow of the Optical Society of America in 1984 and of the Czech Learned Society in 1995, and has been vice-chairman of the Czech and Slovak Chapter of SPIE. He is a member of the international editorial boards of Progress in Optics, Optics and Fine Mechanics and Optica Applicata, and has served as a member of the editorial boards of Journal of Modern Optics (Optica Acta), Quantum Optics, Czechoslovak Journal of Physics, Acta Physica Slovaca, Optics Letters and Acta Physica Polonica. Perina has been a member of the organizing and advisory committees of several ICO Congresses and was elected ICO vice-president for 1987-1990. Among other distinctions, he has received the State Award of the Czech Republic for Merit.

Quasidistributions in nonlinear quantum optics

Jan Perina, Palacký Univ., Czech Republic

It is well known from the papers by R.J. Glauber published in 1963, founding the modern quantum optics, that optical processes having completely quantum behaviour, i.e. having no classical analogue, are described by means of quasidistributions, e.g. using the weighting function in the diagonal Glauber-Sudarshan representation of the density matrix. Such quasidistributions have some properties of classical distribution functions, e.g. they are normalized, some other properties are violated because they are generalized functions [linear functionals]; they can be more singular than the Dirac function and they can take on negative values. Quasidistributions represent very useful tool in quantum optics. This reflects the physical fact that the quantum dynamics are much more rich than the classical dynamics and hence for some quantum effects it may happen that there is a dept of probability expressed by negative values of the classical tool of probability function used for description of a quantum system. Such an approach represents important point of view based on wave properties of quantum systems.

We use optical parametric processes in nonclassical regimes to illustrate the tool of wave quasidistributions, where quantum-noise components take on negative values and when standard Cauchy integrals may fail. The so-called generalized superposition of coherent and quantum-noise fields can be adopted in this case.

We demonstrate nonclassical behaviour of joint wave quasidistributions for general optical parametric processes with classical pumping involving

parametric amplification, frequency conversion and subharmonic generations as well as for some simpler particular processes. We discuss classical and nonclassical regimes and illustrate the system behaviour by means of joint photon-number distributions, explaining their oscillations in quantum regimes. The basic role of sincquasidistributions is shown. Time evolution of the wave quasidistribution from classical to quantum regions is exhibited.

Presentation of the 2012 IUPAP Prize to Prof. Shuang Zhang, Univ. of Birmingham, United Kingdom

The International Union of Pure and Applied Physics (IUPAP) prize in optics will be awarded annually through ICO to a scientist who has made noteworthy contributions to applied optics and photonics during a maximum of 8 years of research experience after having earned a PhD degree.



The ICO Committee of the IUPAP Young Scientist Award has awarded **Shuang Zhang** the 2010 prize for his "outstanding contributions in metamaterials and plasmonics, particularly the first demonstration of the double-fishnet structure and excellent achievements in realization of the first three-dimensional optical negative-index metamaterials". Zhang's achievements with metamaterials and the invisibility cloak have led to over 30 publications; many of them have been published

in journals such as Nature, Nature Physics, Nature Communications, Physical Review Letters and Nano Letters.

Title: "Controlling Light with Bulk and Surface Metamaterials"

Shuang Zhang, Univ. of Birmingham, United Kingdom

Presentation of the 2012 ICO Prize to Dr. Romain Quidant, The Institute of Photonics Sciences (ICFO), Spain

The ICO Prize is awarded to an individual who has made a noteworthy contribution to optics, published submitted for publication before he or she has reached the age of 40.



Dr Romain Quidant is Doctor in Physics from the Université de Bourgogne, Dijon (France). He is the leader of the research group on plasmon nano-optics of the ICFO (The Institute of Photonic Sciences), Barcelona, Spain.

Quidant has made several groundbreaking contributions to the field of nano-optics. More specifically, in spite of his young age, he is recognized as one of the world leaders of the fast-growing area of nanoplasmonics, namely the study of the optical properties of metallic nanostructures.

His most salient achievements are in surface plasmon-based nanotweezers, thermo-plasmonics, and optical antennas. He was awarded the ICO Prize 2012 in recognition of "his extraordinary scientific accomplishments in nanoscale optical manipulation".

Ernst Abbe Lecture: Plasmon Nano-Optics: Taming light on the nanometer scale

Romain Quidant, ICFO-The Institute of Photonics Sciences, Spain

Concluding Remarks

Angela M. Guzmán, ICO Secretary, College of Optics and Photonics CREOL, University of Central Florida, United States

2013 Optics+ Optoelectronics

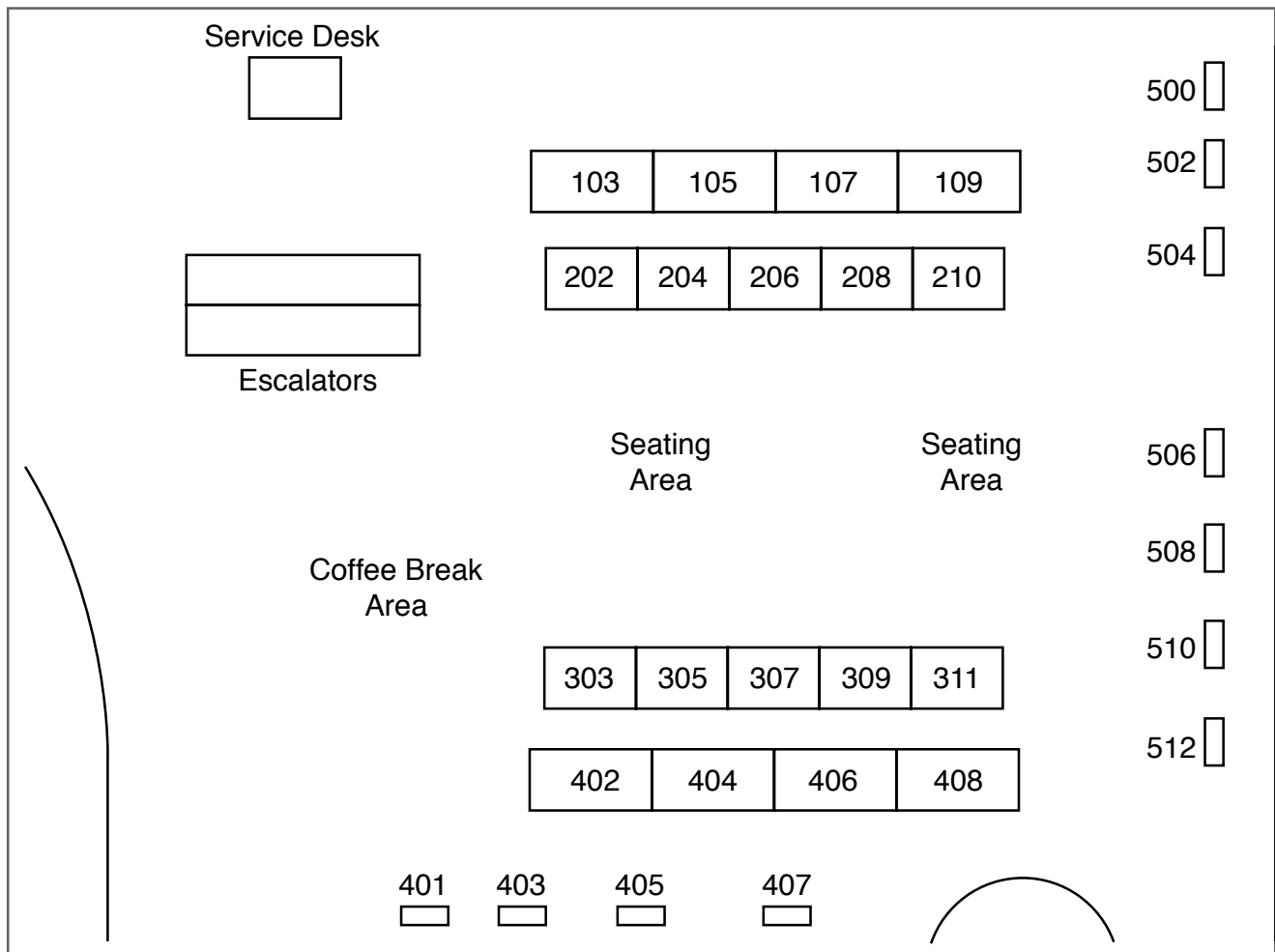
Exhibition Guide



Exhibition Dates & Hours:

Tuesday 16 April 10:00 to 17:00

Wednesday 17 April 10:00 to 16:00



Exhibition Companies

AdiOptica Optical Systems GmbH #506
 CeramOptec GmbH #404
 Crytur Ltd. #208
 CVI Laser Optics #500
 Daugavpils Univ. #504
 EKSMA #403
 EKSPLA #401
 Electro Optics Magazine..... #502
 ET Enterprises Ltd. #402
 Fujikura Europe Ltd. #408

Hellma Materials GmbH #307
 HiPER #105
 Ibss Group Inc. #407
 IDIL Fibres Optiques #510
 Institute of Physics/ELI Beamlines..... #305
 Kurt J. Lesker Co. #103
 Laser Components GmbH #204
 Lastronics GmbH..... #307
 MIT s.r.o. #206
 Northrop Grumman Adaptive Optics / Xinetics. #109

Northrop Grumman Cutting Edge Optronics #109
 OptiGrate Corp..... #512
 PI miCos GmbH #508
 Radiant Zemax, LLC #303
 Rigaku Innovative Technologies Europe #311
 Science and Technology Park of Institute of Physics #401, 403
 Scotel #405
 tec5 AG #210
 ZygoLOT GmbH..... #202

Exhibition Guide

AdlOptica Optical Systems GmbH #506

SPIE Corporate Member

Rudower Chaussee 29-31, Berlin, 12489 Germany
+49 3063926620; fax +49 3063926622
info@adloptica.com; www.adloptica.com

CeramOptec GmbH #404

Siemensstr 44, Bonn, 53121 Germany
+49 228 979 670; fax +49 228 979 6799
info@ceramoptec.de; www.ceramoptec.com

CeramOptec offers a broad range of multimode stepindex fibers and cables for industrial application as well as fiber bundles for spectroscopy, laser application, sensor technology etc.

Crytur Ltd. #208

Palackeho 175, Turnov, 511 01 Czech Republic
+420 481 319 511; fax +420 481 322 323
crytur@crytur.cz; www.crytur.cz

CVI Laser Optics #500

Second Ave, Onchan, IM3 4PA Isle of Man
+44 1624 647 000; fax +44 1624 676 859
info.uk@cvimellesgriot.com; www.cvilaser.com/PublicPages/Pages/CustomerSupport.aspx

CVI Laser Optics manufactures an unparalleled offering of performance laser optics available from stock or as fully customized solutions. Specializing in a variety of standard and custom lenses, mirrors, prisms, filters and other optical components, CVI Laser Optics also offer custom optics and coatings in OEM production quantities for specific, laser based applications.

Daugavpils Univ. #504

13 Vienibas St, Daugavpils, 5400 Latvia
+371 65422180; fax +371 65422890
du@du.lv; www.du.lv/en

EKSMA #403

Mokslininku str 11, c/o Optolita UAB, Vilnius, 08412 Lithuania
+370 5 272 99 00; fax +370 5 272 92 99
info@eksmaoptics.com; www.eksmaoptics.com/en

EKSMA OPTICS is a manufacturer and global supplier of precision optical laser components, optical systems, laser & nonlinear frequency conversion crystals, opto-mechanics and electro-optical BBO, DKDP, KTP Pockels cells with drivers and power supplies used in lasers, laser systems and other optical instruments. The Company has been built on more than 30 years of expertise in the laser and optics fields. Our laser components are used across different laser and photonics applications in scientific, industry, medical and aesthetic, military and aerospace markets. The applications coverage by wavelength spectrum starts from UV (193 nm) through VIS up to IR (20 µm) and at THz ranges

EKSPLA #401

Savanoriu Ave 231, Vilnius, 02300 Lithuania
+370 5 264 9629; fax +370 5 264 1809
sales@ekspla.com; www.ekspla.com

Electro Optics Magazine #502

9 Clifton Court, Cambridge, CB1 7BN United Kingdom
+44 1223 211 170; fax +44 1223 211 107
sales@europascience.com; www.electrooptics.com

Featured Product: Electro Optics magazine is published 10 times a year in print and digital formats

Electro Optics magazine is Europe's leading photonics title, covering business, applications and technology. With an unrivalled pan-European print circulation, a regularly-updated website with the latest news, products and analysis, and two monthly email newsletters, Electro Optics is an essential title for anyone involved in the business of photonics, from crystal growers to system integrators, from laser designers to research scientists. If photonics is your business, choose Electro Optics. Contact: Warren Clark, Publishing Director, warren.clark@europascience.com; Jon Hunt, Advertising Sales Manager, jon.hunt@europascience.com

ET Enterprises Ltd. #402

45 Riverside Way, Uxbridge, UB8 2YF United Kingdom
+44 1895 200 880; fax +44 1895 270 837
sales@et-enterprises.com; www.et-enterprises.com

Featured Product: ET Enterprises manufactures photomultipliers and signal processing electronics for low level light detection applications.

ET Enterprises Limited, which started in 2007, took over the photomultiplier tubes and accessories business of Electron Tubes Limited and continues to manufacture, supply and develop the Electron Tubes brand product range. A subsidiary of Ludlum Measurements Inc., ET Enterprises has the benefit of the additional production facilities of ADIT, a US based producer of photomultipliers. Similarly, ADIT has access to ET Enterprises' development resources and experience in many different photomultiplier applications worldwide.

Fujikura Europe Ltd. #408

C51 Barwell Business Park,, Leatherhead Rd, Chessington Surrey, KT9 2NY United Kingdom
+44 20 8240 2000; fax +44 20 8240 2010
sales@fujikura.co.uk; www.fujikura.co.uk

Fujikura, the world leader in fusion splicing technology, introduces world's smallest and lightest fusion splicers: single fiber fusion splicer "12S", and ribbon fiber fusion splicer "12R". Both splicers have been specially designed for fiber installation in narrow space and for aerial cable installation. A series of new features, such as powerful Li-ion battery, "ready to splice" carrying case, working table provide innovative splicing solutions especially for FTTH application. Specialty splicers, the FSM-100M+, FSM-100P+ and LZM-100, provide advanced capabilities suitable for fiber lasers, sensors, research and development and the medical industry. New capabilities include an innovative "end-view" fiber observation system, patented split v-groove clamping system, XLDF splicing capability, enhanced sweep arc technology for glass processing and fiber tapering. Fujikura is also a world leader in the manufacture of optical fibres. This includes a range of speciality fibres including Polarisation Maintaining Fibres (PANDA) and Radiation Resistant Optical Fibres. In addition we have a large presence in the Medical market through our Coherent Fused Silica semi-rigid Image fibres, along with miniature CMOS modules.

Hellma Materials GmbH #307

Moritz-von-Rohr-Str 1, Jena, 07745 Germany
+49 3641 2877 234; fax +49 3641 2877 203
www.hellma-materials.com

HiPER #105

press@hiper.org; www.hiper.org

With an increasing global focus on the energy challenge, there is a strategic imperative to harness controlled fusion for energy production. Proof of principle for Laser Energy is anticipated soon from the National Ignition Facility in USA and in Europe the HiPER Project is poised to move forward from its preparation phase into technology development. The HiPER team will outline plans for the future and provide updates on the significant advances already made in key areas including laser technology, fusion chamber and target design.

Ibss Group Inc. #407

SPIE Corporate Member

1559B Sloat Blvd Ste 270, San Francisco, CA, 94132-1222 United States
+415 566 5774; fax +415 566 9779
info@ibss.com; www.ibssgroup.com

IDIL Fibres Optiques #510

rue Claude Chappe, Lannion, 22300 France
+33 2 96 05 40 20; fax +33 2 96 05 40 25
info@idil.fr; http://www.idil.fr

Featured Product: Front-end source, laser, amplifier, optoelectronic integration, Photonic Doppler Velocimeter system

IDIL, opto-electronics engineering company specialized in fibre optics, lasers and ultra fast phenomena, can develop and integrate complex opto-electronics systems for science, industry and defence applications. The different activities of the company go from systems, components engineering, front-end source, lasers, fiber sensors, electronics and software. IDIL brings new and innovative solutions by combining high quality manufacturing and R&D. Contact: David ASSOUS, Sales project manager, david.assous@idil.fr; Patrice LE BOUDEC, CEO, patrice.leboudec@idil.fr

Institute of Physics/ELI Beamlines #305

Na Slovance 2, Prague 8, 182 21 Czech Republic
info@eli-beams.eu; www.eli-beams.eu

Kurt J. Lesker Co. #103

15/16 Burgess Rd, Hastings East Sussex, TN35 4NR United Kingdom
+44 1424 458100; fax +44 1424 458103
saleseu@lesker.com; www.lesker.com

Featured Product: Few our NEW online chamber builder: http://www.lesker.com/newweb/menu_chambers.cfm

KJLC is a global leader in the manufacture and design of vacuum technology products, providing solutions for research and production applications. From simple components to intricate vacuum chambers and automated deposition systems, we work with you to provide quality solutions for your vacuum requirements. Visit www.lesker.com to find out more! Contact: Marcin Grzywacz, Sales Manager -Eastern Europe, Marcing@lesker.com; Louise Page, Marketing Specialist, Louisep@lesker.com

Laser Components GmbH #204

Werner von Siemens Str 15, Olching, 82140 Germany
+49 8142 28640; fax +49 8142 286411
info@laser-components.com; www.laser-components.com

Lastronics GmbH #307

Winzerlaer Str 2, Jena, 07745 Germany
+49 3641 508590; fax +49 3641 508591
info@lastronics.com; www.lastronics.de

MIT s.r.o. #206

Klanova 56, Praha 4, 147 00 Czech Republic
+00 420 241712548; fax +00 420 241710252
info@mit-laser.com; www.mot-laser.cz

Northrop Grumman Adaptive Optics / Xinetics #109

115 Jackson Rd, Devens, MA, 01434 United States
+978 772 0352; fax +978 772 2814
AOXinfo@ngc.com; www.northropgrumman.com

Featured Product: Integrated Deformable Mirror with tip/tilt capability

AOA Xinetics specializes in the design, development and manufacturing of products and systems which require state-of-the-art integration of optical, electro-optical, and opto-mechanical technologies. It has supplied laser beam control systems, adaptive optical systems and lightweight SiC mirrors for government, industrial and commercial applications including high energy lasers, free space optics, astronomy and advanced imaging for ISR. Contact: Kevin Ezzo, Business Development Mgr, kevin.ezzo@ngc.com; Terry Bruno, Business Area Mgr, terry.bruno@ngc.com

Northrop Grumman Cutting Edge Optronics #109

SPIE Corporate Member
20 Point West Blvd, Saint Charles, MO, 63301-4430 United States
+636 916 4900; fax +636 916 4994
st-ceolaser-info@ngc.com; www.as.northropgrumman.com/ceolaser

Featured Product: PowerPULSE laser modules up to 4J stored energy, rod diameter 2-25 mm, peak pump power up to 67 kW

Northrop Grumman Cutting Edge Optronics is a leading supplier of high-power laser diodes, DPSS modules, laser diode drivers and complete DPSS laser systems. Many of our diode laser based products have become industry standards, and are used in a wide variety of commercial and military applications. The company is registered to ISO 9001:2008, and is located in St. Charles, MO. Contact: Jay Doster, Sr. Laser Scientist, jay.doster@ngc.com; Jason Fluckey, International Sales Manager, jason.fluckey@ngc.com

OptiGrate Corp. #512

SPIE Corporate Member
562 S Econ Cir, Oviedo, FL, 32765 United States
+407 542 7704; fax +407 542 7804
sales@optigrate.com; www.optigrate.com

PI miCos GmbH #508

Freiburger Str 30, Eschbach, 79427 Germany
+49 7634 5057 230; fax +49 7634 5057 393
info@pimicos.com; www.pimicos.com

Radiant Zemax, LLC #303

SPIE Corporate Member
Stoney Common Rd, 8 Riverside Business Park, Stansted, CM24 8PL United Kingdom
+44 1279 810911; fax +44 1279 810912
eusales@radiantzemax.com; www.radiantzemax.com

Radiant Zemax offers a range of high-quality products that improve and optimize product design and quality while meeting cost goals. Our products include Zemax optical and illumination design software; TrueTest™ automated optical inspection technology, and ProMetric® Imaging Colorimeters and Photometers, Goniometers and Imaging Spheres; and ProMetric production testing software

Rigaku Innovative Technologies Europe #311

Novodvorska 994, Prague 4, 142 21 Czech Republic
+420 239043333; fax +420 239042500
prague@rigaku.com; www.rigaku.com

Featured Product: High resolution X-ray and EUV camera. X-ray, astronomy and EUV optics

RITE is a R&D oriented company. We are leaders in the field of X-ray detector and optics development with the extend to astronomy and EUV optics. Contact: Peter Oberta, Sales and research engineer, peter.oberta@rigaku.com; Ladislav Pina, Managing director, ladislav.pina@rigaku.com

Science and Technology Park of Institute of Physics #401, 403

Savanoriy 231, Vilnius, 02300 Lithuania
+370 5 2661640; fax +370 5 2602317
info@fimtp.lt; www.fimtp.lt

Scontel #405

Bldg 1 5/22 Rossolimo Str, Moscow, 119021 Russian Federation
+7 499 246 1202; fax +7 499 246 6321
scontel@scontel.ru; www.scontel.ru

Featured Product: Superconducting Single Photon Detecting (SSPD) Systems Fast receivers for THz and mid-infrared range

Scontel perform developing, manufacture and supply a Superconducting Single Photon Detectors (SSPD) and ultra-low noise one- /two- /multi-channel Single Photon Registration Systems for visible and near infrared range which operated in a continuous mode. High-speed detectors/mixers and receivers for THz and mid-infrared range. Cryogenic-free SSPD-systems. Contact: Konstantin Smirnov, CEO, smirnov@scontel.ru; Natalya Solovyeva, Sales Engineer, natalya.solovyeva@scontel.ru

tec5 AG #210

In der Au 27, Oberursel, 61440 Germany
+49 6171 9758 0; fax +49 6171 9758 50
info@tec5.com; www.tec5.com

Featured Product: Spectroscopy Systems, Components, Software and Accessories

Since 1993, the tec5 group develops and manufactures high-grade industrial systems and OEM components for UV-VIS-NIR- and Raman spectroscopy. The company's portfolio includes products ranging from spectrometer electronics via embedded systems up to specific system solutions for numerous application areas.

ZygoLOT GmbH #202

Im Tiefen See 58, Darmstadt, 64293 Germany
+49 6151 8806 552; fax +49 6151 8806 88
info@zygolot.de; www.zygolot.de

Product Categories

Astronomy

Northrop Grumman Adaptive Optics / Xinetics

Rigaku Innovative Technologies Europe

Basic Research, Science

IDIL Fibres Optiques

Kurt J. Lesker Co.

Northrop Grumman Adaptive Optics / Xinetics

Rigaku Innovative Technologies Europe

Biomedical, Medical Imaging, Health Care

SCONTEL

Cameras and Imaging Systems

Northrop Grumman Adaptive Optics / Xinetics

Rigaku Innovative Technologies Europe

Chemical and Biological Analysis

Kurt J. Lesker Co.

SCONTEL

tec5 AG

Computing Systems, Data Processing

SCONTEL

tec5 AG

Computing, Data Processing Hardware

tec5 AG

Consulting Services

IDIL Fibres Optiques

Defense, Security, Law Enforcement

IDIL Fibres Optiques

Northrop Grumman Adaptive Optics / Xinetics

Northrop Grumman Cutting Edge Optronics

Detectors, Sensors

Northrop Grumman Adaptive Optics / Xinetics

Rigaku Innovative Technologies Europe

SCONTEL

tec5 AG

Distributor, Reseller, Integrator

Kurt J. Lesker Co.

Rigaku Innovative Technologies Europe

Earth Sciences, Environmental Monitoring, Climate

tec5 AG

Electrical/Signal Analysis Equipment

tec5 AG

Electronic Components

tec5 AG

Electronic, Digital Imaging

Northrop Grumman Adaptive Optics / Xinetics

Fiber Optics and Accessories

IDIL Fibres Optiques

Industrial Sensing and Measurement

IDIL Fibres Optiques

tec5 AG

Information Processing and Computing

SCONTEL

Laser Components and Accessories

IDIL Fibres Optiques

Northrop Grumman Cutting Edge Optronics

Lasers and Systems

IDIL Fibres Optiques

Northrop Grumman Cutting Edge Optronics

LED, OLED, non-laser Light Sources

Kurt J. Lesker Co.

Machine Vision, Factory Automation

Kurt J. Lesker Co.

Northrop Grumman Cutting Edge Optronics

Materials Processing, Lasers in Manufacturing

Kurt J. Lesker Co.

Northrop Grumman Cutting Edge Optronics

Materials, Abrasives, Chemicals

Kurt J. Lesker Co.

Optical Coatings, Thin Films

Kurt J. Lesker Co.

Rigaku Innovative Technologies Europe

Optical Components - Filters, Mirrors, Other

Rigaku Innovative Technologies Europe

Optical Design and Engineering

IDIL Fibres Optiques

Northrop Grumman Adaptive Optics / Xinetics

Rigaku Innovative Technologies Europe

Optics Manufacturing

Northrop Grumman Adaptive Optics / Xinetics

Optomechanical Components, Devices

Northrop Grumman Adaptive Optics / Xinetics

Publishers, Associations, Clusters, Societies

Electro Optics Magazine

Solar & Alternative Energy

Kurt J. Lesker Co.

Spectroscopy Devices and Equipment

tec5 AG

Structural and Infrastructure Sensing

IDIL Fibres Optiques

Test and Measurement, Metrology

IDIL Fibres Optiques

Northrop Grumman Adaptive Optics / Xinetics

Vacuum, Cooling, Gas Handling Equipment

Kurt J. Lesker Co.

Laser Energy Workshop

Conference Chairs: **Mike Dunne**, LIFE Project, Lawrence Livermore National Lab. (United States); **Chris Edwards**, HIPER Project, Science and Technology Facilities Council (United Kingdom); **François Amiranoff**, Lab. d'Utilisation des Lasers Intenses. Ecole Polytechnique (France)

Wednesday 17 April

Introduction and Welcome

Room: Tycho 9:00 to 9:10

Session Chair: **John L. Collier**,
Rutherford Appleton Lab. (United Kingdom)

Session 1

Room: Tycho Wed 9:10 to 10:00

Laser Energy Overview

9:10: **HiPER Project: Status** (*Invited Paper*), Chris Edwards, Science and Technology Facilities Council (United Kingdom) [WS100-1]

9:30: **LIFE Project: Overview** (*Invited Paper*), Mike Dunne, Lawrence Livermore National Lab. (United States) [WS100-2]

Coffee Break Wed 10:00 to 10:20

Session 2

Room: Tycho Wed 10:20 to 12:30

Laser Technology

10:20: **Experimental exploration of a cryogenically operated Yb:YAG laser prototype for inertial fusion laser programs** (*Invited Paper*), Jean-Christophe F. Chanteloup, Thierry Gonçalves-Novo, Ecole Polytechnique (France) ... [WS100-3]

10:50: **Demonstration of a prototype laser amplifier concept scalable to energies suitable for inertial fusion energy projects**, Paul D. Mason, Klaus Ertel, Saumyabrata Banerjee, Paul J. Phillips, Justin Greenhalgh, Cristina Hernandez-Gomez, John L. Collier, Rutherford Appleton Lab. (United Kingdom) ... [WS100-4]

11:10: **High-energy-clasFs cryogenically cooled Yb:YAG multi-slab laser system with low wavefront distortion suitable for fusion driver prototyping**, Martin Divoky, Pawel Sikocinski, Jan Pilar, Antonio Lucianetti, Ondrej Slezák, Magdalena Sawicka, Tomáš Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [WS100-5]

11:30: **Characterisation of a low temperature and adhesive free bonding technique for optical materials**, Nicola L. Beveridge, Gooch & Housego Plc (United Kingdom) and Univ. of Glasgow (United Kingdom); Mark Gardner, Gooch & Housego Plc (United Kingdom); James Hough, Christian J. Killow, Univ. of Glasgow (United Kingdom); Peter E. MacKay, Gooch & Housego Plc (United Kingdom) ... [WS100-6]

11:50: **Cryogenic cooling system for large lasers**, Jean-Paul Perin, CEA Grenoble (France) [WS100-7]

General Discussion: 12:10 to 12:30

Lunch/Exhibition Break Wed 12:30 to 13:40

Session 3

Room: Tycho Wed 13:40 to 17:00

Fusion Physics: Theory and Simulation

13:40: **HiPER project target studies on shock ignition: design principles, modeling, energy scaling, risk reduction options** (*Invited Paper*), Stefano Atzeni, Alberto Marocchino, Angelo Schiavi, Univ. degli Studi di Roma La Sapienza (Italy); Xavier Ribeyre, Guy Schurtz, Edouard Le Bel, Univ. Bordeaux 1 (France); Mauro Temporal, Univ. Politécnica de Madrid (Spain) [WS100-9]

14:10: **Estimation of yield stability for repetition-rate HiPER shock-ignition targets using start-to-end hydrodynamic simulations**, Angelo Schiavi, Alberto Marocchino, Stefano Atzeni, Univ. degli Studi di Roma La Sapienza (Italy) [WS100-10]

14:30: **Non-local electron transport: models and impact on direct-drive shock-ignition targets**, Alberto Marocchino, Stefano Atzeni, Angelo Schiavi, Univ. degli Studi di Roma La Sapienza (Italy) [WS100-11]

14:50: **Lattice structure effects on fast electron transport in advanced fusion targets**, Paul McKenna, David MacLellan, David C. Carroll, Ross J. Gray, Univ. of Strathclyde (United Kingdom); Alex P. L. Robinson, Rutherford Appleton Lab. (United Kingdom); Michael Desjarlais, Sandia National Labs. (United States); Haydn Powell, Univ. of Strathclyde (United Kingdom); Nicola Booth, Rutherford Appleton Lab. (United Kingdom); Graeme Scott, Univ. of Strathclyde (United Kingdom); Matthias Burza, Lund Univ. (Sweden); Xiaohui Yuan, Univ. of Strathclyde (United Kingdom); David Neely, Rutherford Appleton Lab. (United Kingdom); Claes-Göran Wahlström, Lund Univ. (Sweden) [WS100-12]

Coffee Break Wed 15:10 to 15:40

15:40: **Atomic physics modeling and applications for inertial fusion energy**, Emilio Minguez, Univ. Politécnica de Madrid (Spain); Ricardo Florido, Pablo Martel, Jesus Garcia, Rafael Rodriguez, Juan M. Gil, Miguel A. Mendoza, Univ. de Las Palmas de Gran Canaria (Spain) [WS100-13]

16:00: **New fast and accurate numerical method for laser-produced relativistic electrons beams transport in the context of ICF: applications to fast and shock ignition**, Philippe Nicolai, Jean-Luc Feugeas, Mickael Touati, Jerome Breil, Bruno Dubroca, Joao J. Santos, Xavier Ribeyre, Univ. Bordeaux 1 (France); Sergei Y. Gus'kov, P.N. Lebedev Physical Institute (Russian Federation); Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [WS100-15]

16:20: **Full scale modelling of fast ignition with particle-in-cell simulations**, Frederico Fiuza, Univ. Técnica de Lisboa (Portugal) and Lawrence Livermore National Lab. (United States); Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) and Instituto Superior de Ciencias do Trabalho e da Empresa (Portugal); Warren B. Mori, Univ. of California, Los Angeles (United States); Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [WS100-16]

16:40: **High ablation pressure shock-wave driven by supra-thermal electrons**, Xavier Ribeyre, Univ. Bordeaux 1 (France); Sergei Y. Gus'kov, P.N. Lebedev Physical Institute (Russian Federation); Mickael Touati, Jean-Luc Feugeas, Philippe Nicolai, Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [WS100-17]

17:00: **Large amplitude electric fields in inertial confinement fusion capsules**, R. Bingham, Rutherford Appleton Lab. (United Kingdom); R. A. Cairns, Univ. of St. Andrews (United Kingdom); P. Norreys, R. Trines, Rutherford Appleton Lab. (United Kingdom) [WS100-34]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Study of converging spherical shock wave with a finite Mach number in the context of shock ignition, Alexandru Vallet, Xavier Ribeyre, Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [WS100-35]

Collisionless laser absorption due to parametric instabilities in the shock ignition, Ondrej Klimo, Czech Technical Univ. in Prague (Czech Republic); Xavier Ribeyre, Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [WS100-36]

Laser-plasma interaction investigation on a planar target at the conditions relevant to shock ignition, Federica Baffigi, Gabriele Cristoforetti, Petra Koester, Luca Labate, Leonida A. Gizzi, Istituto Nazionale di Ottica (Italy); Fabrizio Consoli, Riccardo De Angelis, Associazione Euratom-ENEA (Italy); Luca Antonelli, Maria Richetta, Univ. degli Studi di Roma Tor Vergata (Italy); Dimitri D. Batani, Gerard Malka, Philippe Nicolai, Johann Maheut, Yong-Joo Rhee, Giulia Folpini, Univ. Bordeaux 1 (France); Jan Badziak, Zosia Kalinowska, Jerzy Wolowski, Tomasz Chodukowski, Tadeusz Pisarczyk, Marcin Rosinski, P. Paris, Institute of Plasma Physics and Laser Microfusion (Poland) [WS100-37]

A LIF scheme for HiPER application based on the combination of ultrahigh laser nonlinear force driven plasma blocks and the relativistic acceleration of ions blocks, Stavros Moustazis, Technical Univ. of Crete (Greece); Paraskevas Lalouis, Foundation for Research and Technology-Hellas (Greece); Heinrich Hora, The Univ. of New South Wales (Australia) [WS100-38]

Overview and latest proposals in SBS PCM based IFE technology featuring self-navigation of lasers on injected direct drive pellets, Milan Kalal, Czech Technical Univ. in Prague (Czech Republic); Ondrej Slezák, Czech Technical Univ. in Prague (Czech Republic) and Institute of Physics of the ASCR, v.v.i. (Czech Republic); Hong Jin Kong, KAIST (Korea, Republic of); Neil B. Alexander, General Atomics (United States) [WS100-39]

Low-density targets and transient processes in subcritical plasmas, Nataliya G. Borisenko, P.N. Lebedev Physical Institute (Russian Federation); Lidia Borisenko, P.N. Lebedev Physical Institute (Russian Federation) and Moscow State Univ. (Russian Federation); Yuri Merkuliev, Andrey Orekhov, P.N. Lebedev Physical Institute (Russian Federation) [WS100-40]

Reflectivity measurement of spherical crystal used as K imagers, Pierre Forestier-Colleoni, Univ. d'Orléans (France); Luca Antonelli, Univ. Bordeaux 1 (France); Dimitri D. Batani, Univ. degli Studi di Milano-Bicocca (Italy); Giulia Folpini, Univ. degli Studi di Milano-Bicocca (Italy); Sébastien Hulín, Univ. Bordeaux 1 (France); Sergei A. Pikuz, Cornell Univ. (United States); Joao Jorge Santos, Univ. Bordeaux 1 (France); Luca Volpe, Univ. degli Studi di Milano-Bicocca (Italy) [WS100-41]

Experimental studies on the relativistic high-current electron beam transport in the context of fast ignition: main results and perspectives for the Petal-LMJ facility, Joao Jorge Santos, Univ. Bordeaux 1 (France); Dimitri D. Batani, Univ. degli Studi di Milano-Bicocca (Italy); Sophie D. Baton, Ecole Polytechnique (France); C. Beaucourt, Univ. Bordeaux 1 (France); Farhat N. Beg, Univ. of California, San Diego (United States); Nathalie Blanchot, Tiberio Ceccotti, Alexis Casner, Commissariat à l'Énergie Atomique (France); Arnaud Debayle, Univ. Politécnica de Madrid (Spain); Fabien Dorchies, Jean-Luc Feugeas, Univ. Bordeaux 1 (France); Shinsuke Fujioka, Osaka Univ. (Japan); Claude Fourment, Univ. Bordeaux 1 (France); L. Gremillet, CEA (France); José J. Honrubia, Univ. Politécnica de Madrid (Spain); Sébastien Hulin, Univ. Bordeaux 1 (France); Jean-Luc Miquel, Commissariat à l'Énergie Atomique (France); Alessio Morace, Univ. degli Studi di Milano-Bicocca (Italy); Peter A. Norreys, Rutherford Appleton Lab. (United Kingdom); Philippe Nicolai, Univ. Bordeaux 1 (France); Frederic Perez, Ecole Polytechnique (France); Hiroshi Sawada, Univ. of California (United States); Hans-Peter Schlenvoigt, Friedrich-Schiller-Universität Jena (Germany); R. H. H. Scott, Rutherford Appleton Lab. (United Kingdom); Vladimir T. Tikhonchuk, Xavier Vaisseau, Benjamin Vauzour, Univ. Bordeaux 1 (France); Mingsheng Wei, General Atomics (United States) [WS100-42]

Thursday 18 April

Session 4

Room: Tycho Thu 9:00 to 12:30

Facilities and Experiments

9:00: **Experiments on shock ignition: what has been done what are the next steps to prepare demonstration on LMJ/PETAL** (*Invited Paper*), Dimitri D. Batani, Univ. Bordeaux 1 (France) [WS100-18]

9:30: **Beamtime opportunities at LMJ/PETAL**, Thierry Massard, Commissariat à l'Énergie Atomique (France) [WS100-19]

9:50: **The Orion laser: update and applications**, Andrew Randewich, AWE plc (United Kingdom) [WS100-20]

Coffee Break Thu 10:10 to 10:30

10:30: **Diagnosics of warm dense matter parameters by high-resolution x-ray spectroscopy of hollow ions**, Anatoly Y. Faenov, Joint Institute for High Temperatures (Japan) and Joint Institute for High Temperatures (Russian Federation) [WS100-21]

10:50: **Investigation of efficiency of laser radiation energy transport into the shock wave with the use of a planar target**, Tadeusz Pisarczyk, Jan Badziak, Andrzej Kasperczuk, Zosia Kalinowska, Tomasz Chodukowski, Piotr Parys, Marcin Rosinski, Jerzy Wolowski, Institute of Plasma Physics and Laser Microfusion (Poland); Sergei Y. Gus'kov, Nikolai N. Demchenko, P.N. Lebedev Physical Institute (Russian Federation); Luca Antonelli, Dimitri D. Batani, Univ. Bordeaux 1 (France); Petra Koester, Istituto Nazionale di Ottica (Italy); Jiri Ullschmied, Institute of Plasma Physics of the ASCR, v.v.i. (Czech Republic); Pawel Pisarczyk, Warsaw Univ. of Technology (Poland) [WS100-22]

11:10: **Efficient laser-driven generation of ultra-intense ion beams for fast ignition in the LICPA accelerator**, Jan Badziak, Slawomir Jablonski, Piotr Raczkza, Tadeusz Pisarczyk, Institute of Plasma Physics and Laser Microfusion (Poland) [WS100-23]

11:30: **Relativistic high-current electron beam stopping power characterization in warm-dense compared to cold-solid matter**, Xavier Vaisseau, Dimitri D. Batani, Univ. Bordeaux 1 (France); Sophie D. Baton, Ecole Polytechnique (France); Farhat N. Beg, Univ. of California, San Diego (United States); Jim D. Bonlie, Lawrence Livermore National Lab. (United States); Sugreev Chawla, Univ. of California, San Diego (United States); Mireille Coury, Univ. of Strathclyde (United Kingdom); Jonathan R. Davies, Univ. of Rochester (United States); Arnaud Debayle, Univ. Politécnica de Madrid (Spain); Luca Fedeli, Univ. degli Studi di Milano-Bicocca (Italy); Robert Fedosejevs, Univ. of Alberta (Canada); Claude Fourment, Univ. Bordeaux 1 (France); Shinsuke Fujioka, Osaka Univ. (Japan); Lorenzo Giuffrida, Univ. Bordeaux 1 (France); Ross J. Gray, Univ. of Strathclyde (United Kingdom); Sébastien Hulin, Univ. Bordeaux 1 (France); José J. Honrubia, Univ. Politécnica de Madrid (Spain); Leonard C. Jarrot, Univ. of California, San Diego (United States); Gregory E. Kemp, The Ohio State Univ. (United States); Shaun M. Kerr, Univ. of Alberta (Canada); Kun Li, Instituto de Plasmas e Fusão Nuclear (Portugal); Paul McKenna, Univ. of Strathclyde (United Kingdom); Harry S. McLean, Lawrence Livermore National Lab. (United States); Mianzhen Mo, Univ. of Alberta (Canada); Alessio Morace, Univ. degli Studi di Milano-Bicocca (Italy); Motoaki Nakatsutsumi, Ecole Polytechnique (France); Philippe Nicolai, Univ. Bordeaux 1 (France); Jaebum Park, Praveesh K. Patel, Lawrence Livermore National Lab. (United States); Jonathan Peebles, Univ. of California, San Diego (United States); Haydn Powell, Univ. of Strathclyde (United Kingdom); Yong-Joo Rhee, Korea Atomic Energy Research Institute (Korea, Republic of); Hiroshi Sawada, Univ. of California, San Diego (United States); Hans-Peter Schlenvoigt, Lab. pour l'Utilisation des Lasers Intenses (France); Anna Sorokovikova, Univ. of California, San Diego (United States); Richard B. Stephens, General Atomics (United States); Vladimir T. Tikhonchuk, Mickael Touati, Benjamin Vauzour, Univ. Bordeaux 1 (France); Luca Volpe, Univ. degli Studi di Milano-Bicocca (Italy); Mingsheng Wei, General Atomics (United States); Vincent Yahia, Ecole Polytechnique (France); Joao J. Santos, Univ. Bordeaux 1 (France) [WS100-24]

General Discussion: 11:50 to 12:30

Lunch Break Thu 12:30 to 13:30

Session 5

Room: Tycho Thu 13:30 to 17:10

Fusion Chamber System

13:30: **Roads to power plant physics and technology in laser fusion energy systems under repetitive operation** (*Invited Paper*), José Manuel Perlado Martín, Univ. Politécnica de Madrid (Spain); Javier Sanz, Univ. Politécnica de Madrid (Spain) and Univ. Nacional de Educación a Distancia (Spain); Jesús Alvarez Ruiz, David Garoz Gomez, Raquel Gonzalez-Arrabal, Nuria Gordillo, Carlo Guerrero, Ovidio Peña, Antonio Rivera, Emma del Rio, David Cereceda, Javier Fernández Tobías, Alberto Fraile, Univ. Politécnica de Madrid (Spain); Rafael Juarez, Univ. Politécnica de Madrid (Spain) and Univ. Nacional de Educación a Distancia (Spain); Nuria Moral, Univ. Politécnica de Madrid (Spain); Consuelo Sánchez, Univ. Nacional de Educación a Distancia (Spain); Gonzalo Vallés, Marta Velarde, Maximo Victoria, Miguel Panizo, Alejandro Prada, Angel Rodríguez-Páramo, Univ. Politécnica de Madrid (Spain) [WS100-26]

14:00: **Development of target injector and repetition fusion chamber systems for HiPER**, Bedrich Rus, Institute of Physics of the ASCR, v.v.i. (Czech Republic); David Neely, Martin K. Tolley, Rutherford Appleton Lab. (United Kingdom); Chris Edwards, Science and Technology Facilities Council (United Kingdom); Mike Tyldesley, Rutherford Appleton Lab. (United Kingdom); Vladimir Kolarik, Institute of Scientific Instruments of the ASCR, v.v.i. (Czech Republic); Tomas Papirek, Martin Hlavac, DELONG INSTRUMENTS a.s. (Czech Republic); José Manuel Perlado Martín, Univ. Politécnica de Madrid (Spain); Jaroslav Nejdil, Colorado State Univ. (United States); Jiri Polan, Michaela Kozlová, Pavel Homer, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Petr Havlik, SWELL, s.r.o. (Czech Republic); Martin Kopecky, SWELL s.r.o. (Czech Republic); Jean-Paul Perin, CEA Grenoble (France); Steve Sanders, Oxford Technologies Ltd (United Kingdom); Richard Haley, Lewis MacFarlane, Nuclear Technologies plc (United Kingdom); Neil B. Alexander, General Atomics (United States) [WS100-27]

14:20: **Testing first wall materials for laser fusion reactors with laser driven ions: What can we learn?**, Jesús Alvarez Ruiz, Javier Fernández Tobías, José Manuel Perlado Martín, David Garoz Gomez, Univ. Politécnica de Madrid (Spain) [WS100-28]

14:40: **Theoretical modeling of carrier dynamics and damage processes in materials interacting with intense radiation sources**, Tzvetia T. Apostolova, Institute of Nuclear Research and Nuclear Energy (Bulgaria); Antonio Rivera, Univ. Politécnica de Madrid (Spain); Martin T. Ivanov, Institute of Nuclear Research and Nuclear Energy (Bulgaria); José Manuel Perlado Martín, Univ. Politécnica de Madrid (Spain) [WS100-29]

Coffee Break Thu 15:00 to 15:20

15:20: **Financial modeling of inertial fusion power plant applied to HiPER project**, Artemis Kaliataki, Panagiotis Petrakis, Stavros Moustazis, Technical Univ. of Crete (Greece) [WS100-30]

15:40: **Microtargetry for inertial fusion energy** (*Invited Paper*), Martin K. Tolley, Rutherford Appleton Lab. (United Kingdom) [WS100-31]

16:10: **High rep-rate free-standing target supply system for HiPER**, Elena R. Koresheva, Irina V. Aleksandrova, Igor E. Osipov, Evgeniy L. Koshelev, Andrei I. Kupriashin, Viacheslav A. Kalabukhov, Tatiana P. Tamasheva, P.N. Lebedev Physical Institute (Russian Federation); Aleksander A. Balolipetskiy, Larissa V. Panina, Russian Academy of Sciences (Russian Federation) [WS100-32]

16:30: **The performance of the silica final lenses in HiPER experimental facility and power plant**, David Garoz Gomez, Raquel Gonzalez-Arrabal, Univ. Politécnica de Madrid (Spain); Rafael Juarez, Univ. Nacional de Educación a Distancia (Spain) and Univ. Politécnica de Madrid (Spain); Jesús Alvarez Ruiz, Univ. Politécnica de Madrid (Spain); Javier Sanz, Univ. Nacional de Educación a Distancia (Spain); José Manuel Perlado Martín, Antonio Rivera, Univ. Politécnica de Madrid (Spain) [WS100-33]

General Discussion: 16:50 to 17:10

Workshop Wrap-Up and Closing Remarks

Room: Tycho 17:10 to 17:30

Session Chairs: **Mike Dunne**, Lawrence Livermore National Lab. (United States); **John L. Collier**, Rutherford Appleton Lab. (United Kingdom)

HiPER Participants Forum continues on Friday (by invitation only)

Metamaterials VIII

Conference Chairs: **Vladimir Kuzmiak**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Peter Markos**, Slovak Univ. of Technology (Slovakia); **Tomasz Szoplik**, Univ. of Warsaw (Poland)

Programme Committee: **Jiri Ctyroky**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Didier Felbacq**, Univ. Montpellier 2 (France); **F. Javier García de Abajo**, Consejo Superior de Investigaciones Científicas (Spain); **Harald W. Giessen**, Univ. Stuttgart (Germany); **Nigel P. Johnson**, Univ. of Glasgow (United Kingdom); **Maria Kafesaki**, Foundation for Research and Technology-Hellas (Greece); **Yuri S. Kivshar**, The Australian National Univ. (Australia); **Rafal Kotynski**, Univ. of Warsaw (Poland); **Andrei Lavrinenko**, Technical Univ. of Denmark (Denmark); **Concita Sibilila**, Univ. degli Studi di Roma La Sapienza (Italy); **Constantin Simovski**, Aalto Univ. School of Science and Technology (Finland); **Costas M. Soukoulis**, Iowa State Univ. (United States); **Martin Wegener**, Karlsruher Institut für Technologie (Germany); **Nikolay I. Zheludev**, Optoelectronics Research Ctr. (United Kingdom); **Richard W. Ziolkowski**, The Univ. of Arizona (United States)

Wednesday 17 April

Opening Remarks

Room: Virgo 8:45 to 8:50

Session 1

Room: Virgo Wed 8:50 to 10:00

Metamaterials I

Session Chair: **Vladimir Kuzmiak**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

8:50: **High contrast composites with unusual elastodynamic properties** (*Invited Paper*), Graeme Milton, The Univ. of Utah (United States) [8771-1]

9:20: **On the feasibility of a 2D acoustic cloak using layers of elastic materials**, Frank Simon, Cécile Dutrion, ONERA (France) [8771-2]

9:40: **Effective index engineering in hybrid metamaterials on SOI waveguides**, Natalia Dubrovina, Xavier Le Roux, Institut d'Électronique Fondamentale (France); Sylvain Blaize, Institut Charles Delaunay (France); André de Lustrac, Institut d'Électronique Fondamentale (France); Gilles Lérondel, Univ. de Technologie Troyes (France); Anatole Lupu, Institut d'Électronique Fondamentale (France) and CNRS (France) [8771-4]

Coffee Break Wed 10:00 to 10:30

Session 2

Room: Virgo Wed 10:30 to 12:30

Periodic Nanostructures I

Session Chair: **Pierre Berini**, Univ. of Ottawa (Canada)

10:30: **Recent progress in radiative heat transfer at the nanoscale** (*Invited Paper*), Jean-Jacques Greffet, Lab. Charles Fabry (France) [8771-5]

11:00: **Active nanoplasmonic metamaterials: from loss-compensation to stopped-light lasing** (*Invited Paper*), Ortwin Hess, Imperial College London (United Kingdom) [8771-6]

11:30: **Preparation and characterization of silver nanowires films for infrared radiation shielding**, Concita Sibilila, Maria Cristina Larcioprete, Univ. degli Studi di Roma La Sapienza (Italy) [8771-7]

11:50: **Plasmon-mediated Smith-Purcell emission**, Naoki Yamamoto, M. Kato, Tokyo Institute of Technology (Japan); F. Javier García de Abajo, Viktor Myroshnychenko, Consejo Superior de Investigaciones Científicas (Spain) [8771-8]

12:10: **Funneling of light in combinations of metal-insulator-metal resonators**, Patrick Bouchon, Charlie Koechlin, ONERA (France); Paul Chevalier, ONERA (France) and Lab. de Photonique et de Nanostructures (France); Fabrice Pardo, Jean-Luc Pelouard, Lab. de Photonique et de Nanostructures (France); Riad Haïdar, Lab. de Photonique et de Nanostructures (France) and ONERA (France) [8771-9]

Lunch/Exhibition Break Wed 12:30 to 13:40

Session 3

Room: Virgo Wed 13:40 to 15:30

Metamaterials II

Session Chair: **Concita Sibilila**, Univ. degli Studi di Roma La Sapienza (Italy)

13:40: **Plasmonic nanorod arrays: 3D metamaterial with hyperbolic dispersion** (*Invited Paper*), Wayne Dickson, Gregory A. Wurtz, Anatoly V. Zayats, King's College London (United Kingdom) [8771-10]

14:10: **Bi-cell THz meta-foils**, Jianfeng Wu, National Univ. of Singapore (Singapore); Herbert O. Moser, Karlsruher Institut für Technologie (Germany); Linke Jian, Agnieszka Banas, Andrew A. Bettiol, Mark Breese, National Univ. of Singapore (Singapore) [8771-11]

14:30: **Single metafilm behavior in optical domain: the determinative role of the metamaterial resonance frequency on the effective parameters**, Natalia Dubrovina, Institut d'Électronique Fondamentale (France); Petru Ghenuche, Nathalie Bardou, Lab. de Photonique et de Nanostructures (France); Shah Nawaz Burokur, André de Lustrac, Institut d'Électronique Fondamentale (France); Stéphane Collin, Lab. de Photonique et de Nanostructures (France); Gilles Lérondel, Univ. de Technologie Troyes (France); Anatole Lupu, Institut d'Électronique Fondamentale (France) [8771-12]

14:50: **Transformation optics and metamaterials at infrared wavelength: engineering of permittivity and permeability**, Rasta Ghasemi, Aloyse Degiron, Xavier Le Roux, Anatole Lupu, André de Lustrac, Institut d'Électronique Fondamentale (France) [8771-13]

15:10: **Negative index resonant states: a route toward nonmetal plasmonics and metamaterials**, Vito Mocella, Principia Dardano, Istituto per la Microelettronica e Microsistemi (Italy); Anna Chiara De Luca, Istituto di Biochimica delle Proteine (Italy); Edoardo De Tommasi, Ivo Rendina, Silvia Romano, Istituto per la Microelettronica e Microsistemi (Italy) [8771-14]

Coffee Break Wed 15:30 to 16:00

Session 4

Room: Virgo Wed 16:00 to 17:50

Plasmonics I

Session Chair: **Constantin Simovski**, Aalto Univ. School of Electrical Engineering (Finland)

16:00: **Nanoplasmonics: material models and computational methods** (*Invited Paper*), Kurt Busch, Humboldt-Univ. zu Berlin (Germany) [8771-15]

16:30: **Spoof plasmons and their potential in photovoltaics**, Constantin Simovski, Aalto Univ. School of Electrical Engineering (Finland) [8771-27]

16:50: **Enhancement of the dynamic Casimir effect within a metal photonic crystal**, Tsuyoshi Ueta, Jikei Medical Univ. (Japan) [8771-17]

17:10: **Asymmetric transmission of surface plasmon polaritons**, Vladimir Kuzmiak, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Alexei A. Maradudin, Univ. of California, Irvine (United States) [8771-18]

17:30: **Metal-dielectric photonic devices for spatial filtering and image contrast enhancement**, Anna Pastuszczak, Piotr Wróbel, Tomasz Stefaniuk, Marcin Stolarek, Rafal A. Kasztelaniec, Rafal Kotynski, Univ. of Warsaw (Poland) [8771-19]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Cyclic MAM synthesis of SPION/BaMoO₄:Er³⁺, Yb³⁺ composite and its optical properties, Chang Sung Lim, Hanseo Univ. (Korea, Republic of); Victor V. Atuchin, A.V. Rzhanov Institute of Semiconductor Physics (Russian Federation) . . [8771-39]

Design and analysis of a metasurface for supporting spoof surface plasmon polaritons (SPPs), Charan M. Shah, RMIT Univ. (Australia); Withawat Withayachumnankul, The Univ. of Adelaide (Australia); Stephen Hanham, Stefan A. Maier, Imperial College London (United Kingdom); Madhu Bhaskaran, Sarath Sriram, Wayne S. T. Rowe, Annan Mitchell, RMIT Univ. (Australia) [8771-40]

Preparation and characterization of Sr₃V₂O₈ nanoparticles performed by cyclic MAS route, Chang Sung Lim, Hanseo Univ. (Korea, Republic of); Victor V. Atuchin, A.V. Rzhanov Institute of Semiconductor Physics (Russian Federation) [8771-41]

Optical properties of a quantum dot: metal nanoparticle complex interacting with a weak probe field, Spyridon G. Kosionis, Andreas F. Terzis, Univ. of Patras (Greece); Seyed M. Sadeghi, The Univ. of Alabama in Huntsville (United States); Emmanuel Paspalakis, Univ. of Patras (Greece) [8771-42]

Three-dimensional metamaterials constructed by metal stress driven method in infrared regime, Che Chin Chen, Instrument Technology Research Ctr. (Taiwan) and RIKEN (Japan); Yu Hsiang Tang, Ming Hua Shiao, Instrument Technology Research Ctr. (Taiwan); Atsushi Ishikawa, Takuo Tanaka, RIKEN (Japan); Pin Chieh Wu, National Taiwan Univ. (Taiwan); Din Ping Tsai, National Taiwan Univ. (Taiwan) and Academia Sinica (Taiwan) [8771-43]

Simulations of some nanomaterials having magnetic properties in the paramagnetic region, Mirela F. Nicolov, Aurel Vlaicu Univ. of Arad (Romania) [8771-44]

Generation of less-diffractive nanoscale beam using a single aperture type plasmonic lens, Sungkyu Seo, Mohendra Roy, Korea Univ. (Korea, Republic of); Seungoh Han, Hoseo Univ. (Korea, Republic of) [8771-45]

An ultrasensitive metamaterials index sensor by phase interrogation, Hsin Cheng Lee, Ta-Jen Yen, National Tsing Hua Univ. (Taiwan); How-Foo Chen, National Yang-Ming Univ. (Taiwan) [8771-46]

Electromagnetic parameter retrieval at oblique incidence, Saima I. Khan, Richard De LaRue, Timothy D. Drysdale, Nigel P. Johnson, Univ. of Glasgow (United Kingdom) [8771-47]

Yellow phosphor coated with Au/TiO₂:Eu thin film for enhanced color rendering index of white LED, Kwang-Cheol Lee, So-Ra Gang, Deok Gi Kim, Sang-Mook Kim, Su Chang Ahn, Korea Photonics Technology Institute (Korea, Republic of) [8771-49]

The formation and structural parameters of new double molybdates RbLn(MoO₄)₂ (Ln = Pr, Nd, Sm, Eu), O.D. Chimitova, Baikal Institute of Nature Management (Russian Federation); Victor V. Atuchin, A.V. Rzhanov Institute of Semiconductor Physics (Russian Federation); Bair G. Bazarov, Baikal Institute of Nature Management (Russian Federation); Maxim S. Molochev, Institute of Physics (Russian Federation); Zhibzema G. Bazarova, Baikal Institute of Nature Management (Russian Federation) [8771-50]

Superconductors in plasmonics and metamaterials: some experimental data, Marcello Gombos, Silvia Romano, Ivo Rendina, Regina Ciancio, Consiglio Nazionale delle Ricerche (Italy); Giovanni Carapella, Univ. degli studi di Salerno (Italy) and Consiglio Nazionale delle Ricerche (Italy); Vito Mocella, Consiglio Nazionale delle Ricerche (Italy) [8771-51]

Photonic crystal-based high efficiency ultrathin silicon-based solar cells, Principia Dardano, Vito Mocella, Giuseppe De Martino, Ivo Rendina, Istituto per la Microelettronica e Microsistemi (Italy) [8771-52]

Nonlinear effects in a plasma metamaterial: Raman scattering, Eduardo P. Alves, Univ. Técnica de Lisboa (Portugal); Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) and Univ. de Lisboa (Portugal); Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [8771-53]

Recent advances in the plane wave expansion method in modeling 2D photonic crystal structures, Roman Antos, Martin Veis, Charles Univ. in Prague (Czech Republic) [8771-54]

Slow light in metamaterial Mach-Zehnder interferometers with arbitrary geometries, Yingying Li, Jie Yuan, Meixiong Chen, National Univ. of Defense Technology (China) [8771-55]

Analysis and simulations of one-way waveguide EM structures for THz region, Pavel Kwiecien, Czech Technical Univ. in Prague (Czech Republic); Vladimír Kuzmiak, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Ivan Richter, Czech Technical Univ. in Prague (Czech Republic); Jiri Ctyroky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8771-56]

Copper silicide processed on silicon substrate by direct laser sintering, Chongwen He, Haihong Zhu, Panpan Hu, Jie Yin, Linda Ke, Huazhong Univ. of Science and Technology (China) [8771-58]

Thursday 18 April

Session 5

Room: Virgo Thu 8:30 to 10:00

Metamaterials III

Session Chair: **Anatoly V. Zayats**, King's College London (United Kingdom)

8:30: **Non-symmetrical hyperbolic media and their potential applications in photovoltaics and photonics** (*Invited Paper*), Igor S. Nefedov, Aalto Univ. School of Science and Technology (Finland); Leonid A. Melnikov, Evgeny I. Nefedov, Saratov State Technical Univ. (Russian Federation) [8771-20]

9:00: **Terahertz metamaterials based on TiO₂ microspheres**, Christelle Kadlec, Filip Dominec, Hynek Nemeč, Petr Kuzel, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Riad Yahiaoui, Patrick Mounaix, U-Chan Chung, Catherine Elissalde, Mario Maglione, Univ. Bordeaux 1 (France); Filip Kadlec, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8771-21]

9:20: **Magneto-optical activity from magnetic and electric dipolar modes in magnetoplasmonic nanodisks**, Alfonso Cebollada, Gaspar Armelles, Fernando García, Antonio Garcia-Martin, María Ujué González, David Meneses, Consejo Superior de Investigaciones Científicas (Spain); Nuno de Sousa, Univ. Autónoma de Madrid (Spain); Luis S. Froufe-Pérez, Instituto de Ciencia de Materiales de Madrid (Spain) [8771-22]

9:40: **Coupling mechanisms of resonators in the THz regime**, Natalia Gneiding, Erlangen Graduate School in Advanced Optical Technologies (Germany); Oleksandr Zhurumskyy, Max Planck Institute for the Science of Light (Germany); Ulf Peschel, Friedrich-Alexander-Univ. of Erlangen-Nürnberg (Germany) . [8771-23]

Coffee Break Thu 10:00 to 10:30

Session 6

Room: Virgo Thu 10:30 to 12:30

Plasmonics II

Session Chair: **Jean-Jacques Greffet**, Lab. Charles Fabry (France)

10:30: **Surface plasmon photodetectors** (*Invited Paper*), Pierre Berini, Univ. of Ottawa (Canada) [8771-24]

11:00: **Hyperbolic metamaterials: what high density of photonic states can do?** (*Invited Paper*), Yuri A. Barnakov, Thejaswi U. Tumkur, J. E. Liveness, Carl E. Bonner Jr., Norfolk State Univ. (United States); Evgenii E. Narimanov, Purdue Univ. (United States); Mikhail A. Noginov, Norfolk State Univ. (United States) . . [8771-25]

11:30: **Resolution of near-field to near-field imaging with silver nanolayer**, Tomasz Stefaniuk, Piotr Wróbel, Jolanta Borysiuk, Tomasz Szoplik, Univ. of Warsaw (Poland) [8771-26]

11:50: **Dissipative optical solitons in planar meta-material cavities**, Alexey Yulin, Univ. of Lisbon (Portugal); Vladimir Kuzmiak, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Sergey L. Eyderman, Univ. of Toronto (Canada) [8771-16]

12:10: **Plasmon spectroscopy and imaging of individual metal nanoparticles**, Viktor Myroshnychenko, F. Javier Garcia de Abajo, Consejo Superior de Investigaciones Científicas (Spain) [8771-28]

Lunch Break Thu 12:30 to 14:00

Session 7

Room: Virgo Thu 14:00 to 15:30

Plasmonics III: Technology

Session Chair: **Tomasz Szoplik**, Univ. of Warsaw (Poland)

14:00: **Taming light-matter interaction on the nanometer scale** (*Invited Paper*), Romain Quidant, ICFO - Institut de Ciències Fotòniques (Spain) [8771-29]

14:30: **Reduction of surface roughness of Ag nanolayers on cooled and wetted substrates**, Piotr Wróbel, Tomasz Stefaniuk, Tomasz Szoplik, Univ. of Warsaw (Poland) [8771-31]

14:50: **Highly organized plasmonic nanoparticles: macroscopic optical tuning a step towards metamaterials**, Nicolas Pazos Perez, Univ. Bayreuth (Germany); Ramon A. Alvarez-Puebla, Univ. Rovira i Virgili (Spain); Andreas Fery, Univ. Bayreuth (Germany) [8771-32]

15:10: **Block-copolymer-based plasmonic metamaterials**, Antonio Capretti, Finizia Auriemma, Claudio De Rosa, Rocco Di Girolamo, Carlo Forestiere, Giovanni Miano, Giovanni P. Pepe, Univ. degli Studi di Napoli Federico II (Italy) . . . [8771-33]

Coffee Break Thu 15:30 to 16:00

Session 8

Room: Virgo **Thu 16:00 to 17:30**

Periodic Nanostructures II

Session Chair: **Peter Markos**, Slovak Univ. of Technology (Slovakia)

16:00: **Beam reflections from one-dimensionally modulated photonic structures** (*Invited Paper*), Kestutis Staliunas, Yu-Chieh Cheng, Univ. Politècnica de Catalunya (Spain); Martynas Peckus, Vilnius Univ. (Lithuania); Simonas Kicas, Institute of Physics (Lithuania); Jose Trull, Crina M. Cojocaru, Ramon A. Vilaseca, Univ. Politècnica de Catalunya (Spain); Ramutis Drazdys, Institute of Physics (Lithuania) [8771-34]

16:30: **Study of the anomalous refraction produced by self assembled gold nanowires**, Concita Sibilia, Alessandro Belardini, Univ. degli Studi di Roma La Sapienza (Italy) [8771-35]

16:50: **Metamaterial fishnet structure formed from nanoimprint lithography with resonances at near infra-red and visible wavelengths**, Graham J. Sharp, Murat Yuce, Univ. of Glasgow (United Kingdom); Xiaolon Hu, City Univ. of Hong Kong (Hong Kong, China) and Univ. of Glasgow (United Kingdom); Mantana Sinworapun, Ali Z. Khokhar, Nigel P. Johnson, Univ. of Glasgow (United Kingdom) [8771-37]

17:10: **A simple model of a two-dimensional quantum metamaterial**, Mark J. Everitt, John H. Samson, S. E. Salelev, Loughborough Univ. (United Kingdom); T. P. Spiller, Univ. of Leeds (United Kingdom); Richard D. Wilson, Alexandre M. Zagoskin, Loughborough Univ. (United Kingdom) [8771-38]

Nonlinear Optics and Applications VII

Conference Chairs: **Mario Bertolotti**, Univ. degli Studi di Roma La Sapienza (Italy); **Joseph Haus**, Univ. of Dayton (United States); **Alexei M. Zheltikov**, Lomonosov Moscow State Univ. (Russian Federation)

Programme Committee: **Kiyoshi Asakawa**; **Javier Aizpurua**, Centro de Fisica de Materiales (Spain); **Bruno Crosignani**; **Angela Maria Guzman**, CREOL, The College of Optics and Photonics, Univ. of Central Florida (United States); **Reinhard Kienberger**, Max-Planck-Institut für Quantenoptik (Germany); **Yuri S. Kivshar**, The Australian National Univ. (Australia); **Geoffrey H. C. New**, Imperial College London (United Kingdom); **Jan Perina Sr.**, Univ. Palackého V Olomouci (Czech Republic); **Mark I. Stockman**, Georgia State Univ. (United States)

Monday 15 April

Opening Remarks

Room: Quadrant **13:25 to 13:30**

Session 1

Room: Quadrant **Mon 13:30 to 15:00**

Anisotropic Materials

Session Chair: **Mario Bertolotti**,
Univ. degli Studi di Roma La Sapienza (Italy)

13:30: **Nonlinear probes of chirality** (*Invited Paper*), Martti Kauranen, Tampere Univ. of Technology (Finland) [8772-1]

14:00: **Measurement of the circular dichroism in the second harmonic optical signal produced by Au covered self ordered dielectric nanospheres**, Concita Sibilia, Alessandro Belardini, Univ. degli Studi di Roma La Sapienza (Italy) [8772-2]

14:20: **Nonlocal nonlinear-magneto-optical response of a plasmonic crystal**, Ilya Razdolski, Diana G. Gheorghie, Radboud Univ. Nijmegen (Netherlands); Evangelos Papaioannou, Uppsala Univ. (Sweden); Andrei Kirilyuk, Alexey V. Kimel, Theo Rasing, Radboud Univ. Nijmegen (Netherlands) [8772-3]

14:40: **Time domain analysis of nonlinear photonic crystal waveguide**, Yasin Farzami, Mahdi Davoodi, Malek Ashtar Univ. of Technology (Iran, Islamic Republic of) [8772-5]

Coffee Break Mon 15:00 to 15:30

Session 2

Room: Quadrant **Mon 15:30 to 17:50**

Nonlinear Materials

Session Chair: **Concita Sibilia**,
Univ. degli Studi di Roma La Sapienza (Italy)

15:30: **Chalcogenide planar waveguide platform for supercontinuum generation in mid-infrared**, Duk-Yong Choi, The Australian National Univ. (Australia); Pan Ma, Australian National Univ. (Australia); Xin Gai, Zhiyong Yang, Steve J. Madden, Barry Luther-Davies, The Australian National Univ. (Australia) [8772-6]

15:50: **Nonlinear effects and models of physical processes in composite nanoparticles of copper halides, silver and silver halides embedded in the single volume under the laser pulse radiation**, Alexander A. Kim, Nikolay V. Nikonov, National Research Univ. of Information Technologies, Mechanics and Optics (Russian Federation); Aleksandr I. Sidorov, Saint Petersburg Electrotechnical Univ. "LETI" (Russian Federation); Viktor A. Tekhomsky, National Research Univ. of Information Technologies, Mechanics and Optics (Russian Federation) [8772-7]

16:10: **Angular-tuning of optical parametric generation efficiency in 2D periodically poled lithium tantalate**, Mohamed Lazoul, Univ. Paris 13 (France) and Ecole Militaire Polytechnique (Algeria); Simohamed M. Lotfy, Ecole Militaire Polytechnique (Algeria); Lung Han Peng, National Taiwan Univ. (Taiwan); Alexis P. Fischer, Zazeddine Boudrioua, Univ. Paris 13 (France) [8772-8]

16:30: **Self-diffraction of laser beams in the case of resonant excitation of excitons in colloidal CdSe/ZnS quantum dots**, Alexander Smirnov, Vladimir S. Dneprovskii, Maria Kozlova, Lomonosov Moscow State Univ. (Russian Federation) [8772-9]

16:50: **Nonlinear two-photon switching by atomic coherence**, Xuemei Su, Zhong Chang Zhuo, Zhuo Ren Chen, Jilin Univ. (China) [8772-10]

17:10: **Nonlinearly chirped quasi-phase-matching for production of ultra-broadband twin photons**, Anahit Tamazyan, Gagik Y. Kryuchkyan, Yerevan State Univ. (Armenia) and Institute for Physical Research (Armenia) [8772-11]

17:30: **Ultra-broadband, mid IR and coherent supercontinuum generated in aperiodic chalcogenide photonic crystal fibers**, Rim Cherif, Amira Baill, Mourad Zghal, National Engineering School of Communication of Tunis (Tunisia) [8772-12]

Tuesday 16 April

Session 3

Room: Quadrant **Tue 9:00 to 10:10**

Plasmons

Session Chair: **Martti Kauranen**, Tampere Univ. of Technology (Finland)

9:00: **The quantum regime in tunneling plasmonics** (*Invited Paper*), Javier Aizpurua, Centro de Fisica de Materiales (Spain) [8772-13]

9:30: **Coherent control of the dynamics of a semiconductor quantum dot-metal nanoparticle complex**, Emmanuel Paspalakis, Sofia Evangelou, Andreas F. Terzis, Univ. of Patras (Greece) [8772-14]

9:50: **Quantum dynamics of a weakly coupled nonlinear dielectric waveguide: surface-plasmon model**, Evren Karakaya, Özgür E. Müstecaplıoğlu, Koç Univ. (Turkey) [8772-15]

Coffee Break Tue 10:10 to 10:30

Session 4

Room: Quadrant **Tue 10:30 to 11:10**

Plasmonics

Session Chair: **Javier Aizpurua**, Centro de Fisica de Materiales (Spain)

10:30: **Nonlinear optical properties of Au nanoparticles in solution**, Mónica Trejo-Durán, Univ. de Guanajuato (Mexico); Delfino Cornejo-Monroy, Univ. Nacional Autónoma de México (Mexico); Edgar Alvarado-Méndez, Antonio de Jesus Olivares-Vargas, Univ. de Guanajuato (Mexico); Julian M. Estudillo-Ayala, Univ. de Guanajuato (Mexico); Victor M. Castaño-Meneses, Univ. Nacional Autónoma de México (Mexico) [8772-16]

10:50: **Generation of entangled polaritons in doped media**, Alexei V. Prokhorov, Igor Barinov, Sergei M. Arakelian, Vladimir State Univ. (Russian Federation) [8772-17]

Session 5

Room: Quadrant **Tue 11:10 to 12:30**

Solitons

Session Chair: **Javier Aizpurua**, Centro de Fisica de Materiales (Spain)

11:10: **Influence of iron doping on spatial soliton formation and fixing in lithium niobate crystals**, Eugenio Fazio, Univ. degli Studi di Roma La Sapienza (Italy); Anna Maria Zaltron, Univ. degli Studi di Padova (Italy); Alessandro Belardini, Univ. degli Studi di Roma La Sapienza (Italy); Nicola Argiolas, Cinzia Sada, Univ. degli Studi di Padova (Italy) [8772-18]

11:30: **Low-power plasmon-soliton in realistic chalcogenide based planar structures**, Gilles Renversez, Wiktor Walasik, Institut Fresnel (France); Yaroslav V. Kartashov, ICFO - Institut de Ciències Fotòniques (Spain) and Institute of Spectroscopy (Russian Federation); Virginie Nazabal, Univ. de Rennes 1 (France); Mathieu Chauvet, FEMTO-ST (France); Petr Nemeč, Univ. Pardubice (Czech Republic) [8772-19]

11:50: **Introduction of optical Newton Cradle model for understanding the N-solitons fission process under the action of higher order dispersion**, Rodislav Driben, Tel Aviv Univ. (Israel) and Univ. Paderborn (Germany); Boris A. Malomed, Tel Aviv Univ. (Israel); Dmitry V. Skryabin, Univ. of Bath (United Kingdom); Alexey Yulin, Univ. of Lisbon (Portugal) [8772-20]

12:10: **The optical control of spatial dissipative solitons in optical fibers filled with a cold atomic gas**, Alexei V. Prokhorov, Mikhail Gubin, Andrei Y. Leksin, Vladimir State Univ. (Russian Federation); Maxim G. Gladush, Institute of Spectroscopy (Russian Federation); Sergei M. Arakelian, Vladimir State Univ. (Russian Federation) [8772-21]

Lunch/Exhibition Break Tue 12:30 to 13:30

Session 6

Room: Quadrant Tue 13:30 to 15:20

Applications/Devices I

Session Chair: **Mario Bertolotti**,
Univ. degli Studi di Roma La Sapienza (Italy)

13:30: **Attosecond electron synchrotron on a nanoscale** (*Invited Paper*), J. Mikhailova, Max-Planck-Institut für Quantenoptik (Germany) [8772-22]

14:00: **Non-maxwellian electron distribution in time-dependent simulation of low-Z elements illuminated by a high intensity X-ray laser**, Alberto G. Garcia, Pedro Velarde, Univ. Politécnica de Madrid (Spain); François de Gaufridy, Univ. Politécnica de Madrid (Spain) and Czech Academy of Sciences (Czech Republic); Manuel Cotel, David Portillo, Alfonso Barbas, Augustín I. González, Univ. Politécnica de Madrid (Spain); Philippe Zeitoun, Ecole Nationale Supérieure de Techniques Avancées (France) [8772-23]

14:20: **Experimental study of a crystalline-resonator based optoelectronic oscillator**, Patrice Salzenstein, Aurélien Coillet, Rémi Henriet, Laurent Larger, Yanne K. Chembo, Ctr. National de la Recherche Scientifique (France) .. [8772-24]

14:40: **Nonlinear self-reflection of intense ultra-wideband femtosecond pulses in optical fiber**, Leonid Konev, Yuri A. Shpolyanskiy, National Research Univ. of Information Technologies, Mechanics and Optics (Russian Federation) .. [8772-25]

15:00: **A high efficiency wavelength conversion scheme based on four-wave mixing in semiconductor optical amplifier utilizing ASE broadband source at ultrahigh 1000Gbs data rate**, Osayd M. T. Kharraz, David I. Forsyth, Univ. Teknologi Malaysia (Malaysia) [8772-26]

Coffee Break Tue 15:20 to 15:50

Session 7

Room: Quadrant Tue 15:50 to 18:10

Applications/Devices II

Session Chair: **Valentin I. Vlad**,
National Institute for Lasers, Plasma and Radiation Physics (Romania)

15:50: **Silicon nitride waveguide with flattened chromatic dispersion**, Jose Manuel Chavez Boggio, Daniel Bodenmüller, Tino Fremberg, Leibniz-Institut für Astrophysik Potsdam (Germany); René Eisermann, Leibniz-Institut für Innovative Mikroelektronik (Germany); Roger Haynes, Martin M. Roth, Leibniz-Institut für Astrophysik Potsdam (Germany) [8772-27]

16:10: **Bulk dipole contribution to second harmonic generation in diamond lattices**, Hendradi Hardhienata, David Stifter, Kurt Hingerl, Johannes Kepler Univ. Linz (Austria) [8772-43]

16:30: **Numerical model for DGD estimation in optical transmission system**, Ján Litvik, Daniel Benedikovic, Univ. of Zilina (Slovakia); Marc Wuilpart, Univ. de Mons (Belgium); Milan Dado, Michal Kuba, Univ. of Zilina (Slovakia) [8772-28]

16:50: **Double-frequency Brillouin fiber lasers**, Andrei A. Fotiadi, Faculté Polytechnique de Mons (Belgium) and Ioffe Physico-Technical Institute (Russian Federation) and Ulyanovsk State Univ. (Russian Federation) [8772-29]

17:10: **Tunable multiwavelength quantum dot external-cavity lasers**, Gray Lin, Chen-Hung Pai, National Chiao Tung Univ. (Taiwan) [8772-30]

17:30: **The analytical model of ground-state lasing in broadband semiconductor quantum dot lasers**, Vladimir V. Korenev, Artem V. Savelyev, Alexey E. Zhukov, Alexander I. Omelchenko, Saint Petersburg Academic Univ. (Russian Federation); Mikhail V. Maximov, Ioffe Physico-Technical Institute (Russian Federation) [8772-31]

17:50: **Cascaded carbon monoxide laser frequency conversion mid IR range in a single ZnGeP₂ crystal**, Igor O. Kinyaevskiy, P.N. Lebedev Physical Institute (Russian Federation) [8772-32]

Wednesday 17 April

Session 8

Room: Quadrant Wed 9:00 to 10:10

Materials I

Session Chair: **Joseph W. Haus**, Univ. of Dayton (United States)

9:00: **DNA: a nonlinear material for green photonics** (*Invited Paper*), Valentin I. Vlad, National Institute for Lasers, Plasma and Radiation Physics (Romania) [8772-33]

9:30: **DNA translocation through a periodically patterned nanoprobe**, Seong Soo Choi, Myoung Jin Park, Sun Moon Univ. (Korea, Republic of); Namkyoo Park, Seoul National Univ. (Korea, Republic of); Seung Min Park, Luke P. Lee, Univ. of California, Berkeley (United States) [8772-34]

9:50: **Application of layered graphene for solid state laser mode-locking in the near-infrared**, Uwe Griebner, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany); Elena Ugolotti, Univ. degli Studi di Pavia (Italy); Andreas Schmidt, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany); Jun Wan Kim, Dong-Il Yeom, Fabian Rotermund, Ajou Univ. (Korea, Republic of); Sukang Bae, Byung Hee Hong, Seoul National Univ. (Korea, Republic of); Xavier Mateos Ferre, Francesc Díaz, Univ. Rovira i Virgili (Spain); Antonio Agnesi, Univ. degli Studi di Pavia (Italy); Valentin P. Petrov, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany) [8772-35]

Coffee Break Wed 10:10 to 10:30

Session 9

Room: Quadrant Wed 10:30 to 12:30

Materials II

Session Chair: **Mario Bertolotti**,
Univ. degli Studi di Roma La Sapienza (Italy)

10:30: **Reflection and propagation of laser pulse with a few cycles in medium with time-dependent dielectric permittivity**, Vyacheslav A. Trofimov, Ivan V. Mishanov, Lomonosov Moscow State Univ. (Russian Federation) [8772-36]

10:50: **Spatial localization of microwave pulse energy in a layered linear medium containing metamaterial in some layers**, Vyacheslav A. Trofimov, Evgeniy V. Trykin, Lomonosov Moscow State Univ. (Russian Federation); Sergey I. Tarapov, Sergey V. Nedukh, Usikov Institute of Radiophysics and Electronics (Ukraine) [8772-37]

11:10: **Numerical investigation of the Gaussian pulses propagating in optical fibers with refractive indices stochastically changed due to environmental conditions**, Libor Ladányi, Róbert Menkyna, Jarmila Müllerová, Univ. of Zilina (Slovakia) [8772-38]

11:30: **Two-photon polymerization of diacrylate mesogens for producing polymer with patterned orientation structures**, Wenjun Zheng, Wei-Zhe Huang, National Sun Yat-Sen Univ. (Taiwan) [8772-39]

11:50: **Laser beam bending cylindrical gradient curved lens under atmospheric conditions**, Remzi Yildirim, Gazi Univ. (Turkey) [8772-40]

12:10: **The role of MgO and CuO on the optical properties of lithium potassium borate**, Yasser Alajerami, Univ. Teknologi Malaysia (Malaysia) and Alazhar Univ. (Palestinian Territory, Occupied); Suhairul Hashim, Wan Muhamad S. Wan Hassan, Ahmad Termizi Ramli, Univ. Teknologi Malaysia (Malaysia) [8772-41]

Poster Session

Meridian HallWed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Determination of the uncertainty for phase noise delivered by an optoelectronic based system, Patrice Salzenstein, Ekaterina Pavlyuchenko, Ctr. National de la Recherche Scientifique (France) [8772-42]

Polarization properties of vector solitons generated by modulation instability in circularly birefringent fibers, Evgeny A. Kuzin, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico); Ariel Flores Rosas, Univ. de Guanajuato (Mexico); Balder-Arturo Villagomez-Bernabe, Josue-Israel Peralta-Hernandez, Nikolai A. Korneev, Baldemar Ibarra-Escamilla, Instituto Nacional de Astrofísica, Óptica y Electrónica (Mexico); Manuel Durán-Sánchez, Univ. Tecnológica de Puebla (Mexico); Andres Gonzalez-Garcia, Instituto Tecnológico Superior de Guanajuato, (Mexico); Olivier J. Pottiez, Ctr. de Investigaciones en Óptica, A.C. (Mexico)..... [8772-45]

Two-photon excited fluorescence with thermal light, Andreas Jechow, Univ. Potsdam (Germany) and Griffith Univ. (Australia); Henning Kurzke, Michael Seefeldt, Axel Heuer, Ralf Menzel, Univ. Potsdam (Germany) [8772-46]

Compact blue light source by single-pass second harmonic generation of DBR tapered laser radiation, Junhee Park, Tai-Young Kang, Korea Electronics Technology Institute (Korea, Republic of); Hae-nam Hae-nam, PSI corporation (Korea, Republic of); Boobin Yim, WikiOptics (Korea, Republic of); Han-Young Lee, Korea Electronics Technology Institute (Korea, Republic of) [8772-47]

Frequency doubling of 1560nm laser with single-pass, double-pass and cascaded PPMgO:LN crystals and frequency locking to Rb D2 line, Junmin Wang, Shanlong Guo, Yashuai Han, Baodong Yang, Jun He, Shanxi Univ. (China) [8772-48]

Highly nonlinear tellurite fiber with engineered chromatic dispersion for broadband optical parametric amplification, Edmund P. Samuel, Tong H. Tuan, Koji Asano, Takenobu Suzuki, Yasutake Ohishi, Toyota Technological Institute (Japan)..... [8772-49]

Second order optical nonlinear processes as tools to probe anomalies inside high confinement microcavities, Marc Collette, Normand Beaudoin, Serge Gauvin, Univ. de Moncton (Canada) [8772-50]

Experimental investigation of high power picosecond 1.06 μm pulse propagation in Bragg fibers, Michal Jelínek, Václav Kubeček, Helena Jelínková, Czech Technical Univ. in Prague (Czech Republic); Vlastimil Matejcek, Ivan Kasik, Ondrej Podrazky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8772-52]

Pump-probe optical response of an asymmetric quantum dot molecule, Spyridon G. Kosionis, Univ. of Patras (Greece); John Boviatsis, Technological Educational Institute of Patras (Greece); Emmanuel Paspalakis, Univ. of Patras (Greece) [8772-53]

Enhancement of optical nonlinearity of LCs with gold-nanoparticle-doped alignment layers, Hui-Chi Lin, National Formosa Univ. (Taiwan); Andy Y. G. Fuh, Ci-Yong Lin, Ming-Shian Li, National Cheng Kung Univ. (Taiwan) [8772-54]

Damage thresholds of S-doped GaSe, Yuri M. Klimachev, Andrey A. Ionin, Igor O. Kinyavskiy, Andrey A. Kotkov, Andrey Y. Kozlov, P.N. Lebedev Physical Institute (Russian Federation); Yuri M. Andreev, Institute for Monitoring of Climatic and Ecological Systems (Russian Federation); Alexander E. Kokh, Konstantin A. Kokh, Trofimuk United Institute of Geology, Geophysics and Mineralogy (Russian Federation); Grigory V. Lanskiy, Anna V. Shaiduko, Institute for Monitoring of Climatic and Ecological Systems (Russian Federation); Valeriy A. Svetlichnyi, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation) [8772-55]

Electronic structure of KTiOAsO₄, a novel material for non-linear optical applications, Victor V. Atuchin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); O. Y. Khyzhun, V. L. Bekenev, A. K. Sinelnichenko, Frantsevich Institute for Problems of Materials Science (Ukraine); Ludmila I. Isaenko, S. A. Zhurkov, Institute of Mineralogy and Petrography (Russian Federation) [8772-56]

Broadband laser source emitting within 2.5-8.3 μm, Igor O. Kinyavskiy, Andrey A. Ionin, Yuri M. Klimachev, Andrey Y. Kozlov, Andrey A. Kotkov, P.N. Lebedev Physical Institute (Russian Federation); Yuri M. Andreev, Grigory V. Lanskiy, Anna V. Shaiduko, Institute for Monitoring of Climatic and Ecological Systems (Russian Federation) [8772-57]

Anderson localization of light in optical lattices with PT symmetry, Dragana M. Jovic, Institute of Physics (Serbia) [8772-58]

Optical propagation loss measurements in electro optical host-guest waveguides, Edgars Nitiss, Martins A. Rutkis, J. Busenbergs, Univ. of Latvia (Latvia) [8772-59]

C-band amplification through fibre ring laser in generating multi wavelength, Mohd Nizam Abdullah, Sahbudin B. Shaari, Abang Annur Ehsan, P. Susthitha Menon, Univ. Kebangsaan Malaysia (Malaysia); Mohd Nasir Zainal Abidin, Abdul Rashid Zainal Abidin, National Metrology Lab. (Malaysia) [8772-60]

All-Optical Four-bit Toffoli gate with possible implementation in solids, Gayane Grigoryan, Vigen O. Chaltykyan, Emil A. Gazazyan, Olesya Tikhova, Institute for Physical Research (Armenia) [8772-61]

Structural field of K₂Al₂B₂O₇-family borate crystals, Victor V. Atuchin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); Bair G. Bazarov, Victoria Grossman, Baikal Institute of Nature Management (Russian Federation); Maxim S. Molokeev, Kirensky Institute of Physics (Russian Federation); Zhibzema G. Bazarova, Baikal Institute of Nature Management (Russian Federation) [8772-62]

Laser-induced incandescence of carbon surface: a method for temperature estimation, Katerina S. Zelenska, Sergiy E. Zelensky, National Taras Shevchenko Univ. of Kyiv (Ukraine) [8772-63]

Optimal doping of GaSe with isoivalent elements, Victor V. Atuchin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); Yuri M. Andreev, Institute for Monitoring of Climatic and Ecological Systems (Russian Federation); Konstantin A. Kokh, Russian Academy of Sciences (Russian Federation); Gregory V. Lanskiy, Anna V. Shaiduko, Institute for Monitoring of Climatic and Ecological Systems (Russian Federation); Tatyana Izaak, Sobolev Institute of Geology and Mineralogy (Russian Federation); Valeriy A. Svetlichnyi, Tomsk State Univ. (Russian Federation) [8772-64]

Microstructure and optical properties of heterogeneous crystal GaSe:InS, Victor V. Atuchin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); Nina Beisel, Nikolaev Institute of Inorganic Chemistry (Russian Federation); Konstantin A. Kokh, Russian Academy of Sciences (Russian Federation); Vladimir Kruchinin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); Ilya Korolkov, Nikolaev Institute of Inorganic Chemistry (Russian Federation); Lev D. Pokrovsky, V. Lashkaryov Institute of Semiconductor Physics (Russian Federation); Alphiya Tsygankova, Nikolaev Institute of Inorganic Chemistry (Russian Federation); Alexander E. Kokh, Trofimuk United Institute of Geology, Geophysics and Mineralogy (Russian Federation) [8772-65]

Photon Counting Applications IV

Conference Chairs: **Ivan Prochazka**, Czech Technical Univ. in Prague (Czech Republic); **Roman Sobolewski**, Institute of Electron Technology (Poland), Univ. of Rochester (United States)

Programme Committee: **Josef Blazej**, Czech Technical Univ. in Prague (Czech Republic); **Ulrich Schreiber**, Technische Univ. München (Germany); **Valery Zwiller**, Technische Univ. Delft (Netherlands)

Wednesday 17 April

Poster Session

Meridian Hall **Wed 17:40 to 19:15**

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Photoreadout statistics analysis during space objects image acquisition in large aperture telescope, Yury P. Shumilov, Peter A. Bakut, Vadim G. Vigon, Evgeniy A. Grishin, Victor D. Shargorodskii, Precision Systems and Instruments Corp. (Russian Federation) [8773-19]

Thermoelectric nanowire single-photon detector, Astghik A. Kuzanyan, Armen S. Kuzanyan, Institute for Physical Research (Armenia) [8773-20]

Photon counting Lidar for deep space applications: demonstrator design, Vojtech Michalek, Michael Vacek, Ivan Prochazka, Josef Blazej, Czech Technical Univ. in Prague (Czech Republic); Marek Peca, VZLÚ, a.s. (Czech Republic) [8773-21]

NbTiN superconducting nanostructures with ultrahigh critical current densities for single-photon detectors, Wojciech Slys, Marek Guzewicz, Jaroslaw Z. Domagala, Marcin Juchniewicz, Michal Borysiewicz, Renata Kruzka, Krystyna Golaszewska, Institute of Electron Technology (Poland); Valery Kolkovskiy, Institute of Physics (Poland); Jacek Ratajczak, Jan Bar, Maciej Wegrzecki, Adam Laszcz, Andrzej Czerwiński, Institute of Electron Technology (Poland); Roman Sobolewski, Institute of Electron Technology (Poland) and Univ. of Rochester (United States) [8773-22]

Opening Remarks

Room: Stella **8:25 to 8:30**

Session 1

Room: Stella **Wed 8:30 to 10:30**

Solid State Photon Counting

Session Chair: **Josef Blazej**, Czech Technical Univ. in Prague (Czech Republic)

8:30: **Silicon photomultipliers development at STMicroelectronics** (*Invited Paper*), Massimo C. Mazzillo, Ferenc Nagy, Delfo D. Sanfilippo, Giuseppina G. Valvo, Beatrice Carbone, Angelo Piana, Pier Giorgio G. Fallica, Salvo Coffa, STMicroelectronics (Italy) [8773-1]

9:00: **Compact 32-channel time-resolved single-photon detection system** (*Invited Paper*), Andrea Cuccato, Sebastiano Antonioli, Angelo Gulinatti, Ivan Labanca, Ivan Rech, Massimo Ghioni, Politecnico di Milano (Italy) [8773-2]

9:30: **Figures of merit for CMOS SPADs and arrays**, Danilo Bronzi, Federica A. Villa, Simone Bellisai, Politecnico di Milano (Italy); Simone Tisa, Micro Photon Devices S.r.l. (Italy); Giancarlo Ripamonti, Alberto Tosi, Politecnico di Milano (Italy) . [8773-3]

9:50: **Compact CMOS analog readout circuit for photon counting applications**, Ekaterina Panina, Univ degli Studi di Trento (Italy); Lucio Pancheri, Univ. degli Studi di Trento (Italy); Leonardo Gasparini, Nicola Massari, David Stoppa, Fondazione Bruno Kessler (Italy); Gian-Franco Dalla Betta, Univ. degli Studi di Trento (Italy) [8773-4]

10:10: **Buffer direct injection readout integrated circuit design for dual band infrared focal plane array detector**, Yi-Chuan Lu, Tai-Ping Sun, Hsiu-Li Shieh, National Chi Nan Univ. (Taiwan); Shiang-Feng Tang, Wen-Jen Lin, Chung-Shan Institute of Science and Technology (Taiwan) [8773-5]

Coffee Break Wed 10:30 to 11:00

Session 2

Room: Stella **Wed 11:00 to 12:30**

Photon Counting Applications I

Session Chair: **Ralph B. James**, Brookhaven National Lab. (United States)

11:00: **Silicon photonic quantum optical devices** (*Invited Paper*), Stefan F. Preble, Rochester Institute of Technology (United States) [8773-6]

11:30: **Photon counting delay stability as a key factor for optical time transfer**, Josef Blazej, Ivan Prochazka, Jan Kodet, Czech Technical Univ. in Prague (Czech Republic) [8773-7]

11:50: **Photon counting Lidar for deep space applications: concept and simulator**, Michael Vacek, Vojtech Michalek, Josef Blazej, Ivan Prochazka, Czech Technical Univ. in Prague (Czech Republic) [8773-8]

12:10: **High accurate range finding with SPADs at 1064nm**, Johann Eckl, Bundesamt für Kartographie und Geodäsie (Germany) [8773-9]

Lunch Break Wed 12:30 to 13:40

Session 3

Room: Stella **Wed 13:40 to 15:10**

Photon Counting Applications II

Session Chair: **Valery Zwiller**, Technische Univ. Delft (Netherlands)

13:40: **Photon-counting CdZnTe X-ray radiation detectors** (*Invited Paper*), Ralph B. James, Aleksey E. Bolotnikov, Giuseppe S. Camarda, Yonggang Cui, Anwar Hossain, KiHyun Kim, Utpal N. Roy, Ge Yang, Brookhaven National Lab. (United States) [8773-10]

14:10: **Development of position-sensitive CdZnTe detectors for imaging and spectroscopy of X- and Gamma-rays**, Aleksey E. Bolotnikov, Giuseppe S. Camarda, Yonggang Cui, Gianluigi De Geronimo, Jack Fried, Anwar Hossain, Utpal N. Roy, Ge Yang, Emerson Vernon, Ralph B. James, Brookhaven National Lab. (United States) [8773-11]

14:30: **Ultra-compact 32-channel system for time-correlated single-photon counting measurements**, Sebastiano Antonioli, Andrea Cuccato, Luca Miari, Ivan Labanca, Ivan Rech, Massimo Ghioni, Politecnico di Milano (Italy) [8773-12]

14:50: **The application of single photon detection technique to laser time transfer of Chinese navigation satellites**, Wendong Meng, Haifeng Zhang, Zhongping Zhang, Shanghai Astronomical Observatory (China); Ivan Prochazka, Czech Technical Univ. in Prague (Czech Republic) [8773-13]

Coffee Break Wed 15:10 to 15:40

Session 4

Room: Stella **Wed 15:40 to 17:40**

Superconducting Photon Counting

Session Chair: **Roman Sobolewski**, Institute of Electron Technology (Poland), Univ. of Rochester (United States)

15:40: **Superconducting single photon detectors for quantum optics** (*Invited Paper*), Valery Zwiller, Technische Univ. Delft (Netherlands) [8773-14]

16:10: **Proximitized NbN/NiCu nanostructures as new promising superconducting single-photon detectors** (*Invited Paper*), Giampiero Pepe, Loredana Parlato, CNR-SPIN (Italy) and Univ. degli Studi di Napoli Federico II (Italy); Carmela Bonavolonta, Massimo Valentino, CNR-SPIN (Italy); Corrado de Lisio, CNR-SPIN (Italy) and Univ. degli Studi di Napoli Federico II (Italy); Roberto Cristiano, Mikkel Ejrnaes, Istituto di Cibernetica Eduardo Caianiello (Italy); Hiroaki Myoren, Saitama Univ. (Japan); Roman Sobolewski, Univ. of Rochester (United States) and Institute of Electron Technology (Poland) [8773-15]

16:40: **Integrated single photon generation and detection**, Iman Esmaeil Zadeh, J. W. Niels Los, Michael E. Reimer, Gabriele Bulgarini, Technische Univ. Delft (Netherlands); Sander N. Dorenbos, Single Quantum (Netherlands); Valery Zwiller, Technische Univ. Delft (Netherlands) and Single Quantum (Netherlands) . [8773-16]

17:00: **Photoresponse studies of proximitized superconductor/ferromagnet nanostructures for photon detection**, Roman Sobolewski, Institute of Electron Technology (Poland) and University of Rochester (United States); Loredana Parlato, Giampiero Pepe, Corrado De Lisio, V. Pagliarulo, Carmela Bonavolontà, CNR-SPIN (Italy); R. Arpaia, CNR-SPIN (Italy) and Chalmers University of Technology (Sweden); F. Miletto Granozio, Umberto Scotti di Uccio, CNR-SPIN (Italy); Roberto Cristiano, Mikkel Ejrnaes, Istituto di Cibernetica Eduardo Caianiello (Italy); Wojciech Słysz, Institute of Electron Technology (Poland); Yuhan Wang, Yunus Akbas, University of Rochester (United States) [8773-17]

17:20: **NbN superconducting single-photon detector for practical applications**, Alexander A. Korneev, Moscow State Pedagogical Univ. (Russian Federation) [8773-18]

Quantum Optics and Quantum Information Transfer and Processing

Conference Chair: **Jaromír Fiurásek**, Palacky Univ. Olomouc (Czech Republic)

Programme Committee: **Ulrik Andersen**, Technical Univ. of Denmark (Denmark); **Marco Bellini**, Istituto Nazionale di Ottica (Italy); **Nicolas J. Cerf**, Univ. Libre de Bruxelles (Belgium); **Miloslav Dusek**, Palacky Univ. Olomouc (Czech Republic); **Jens S. Eisert**, Univ. Potsdam (Germany); **Alexander I. Lvovsky**, Univ. of Calgary (Canada); **Jeremy L. O'Brien**, Univ. of Bristol (United Kingdom); **Geoff J. Pryde**, Griffith Univ. (Australia); **Fabio Sciarrino**, Univ. degli Studi di Roma La Sapienza (Italy); **Andrew J. Shields**, Toshiba Research Europe Ltd. (United Kingdom); **Juan P. Torres**, ICFO - Institut de Ciències Fotòniques (Spain)

Tuesday 16 April

Opening Remarks

Room: Virgo 8:50 to 9:00

Session 5

Room: Virgo Tue 9:00 to 10:30

Optical Quantum Information Processing

Session Chair: **Jaromír Fiurásek**,
Palacky Univ. Olomouc (Czech Republic)

9:00: **Experimental boson sampling** (*Invited Paper*), Matthew A. Broome, Alessandro Fedrizzi, Saleh Rahimi-Keshari, The Univ. of Queensland (Australia); Justin Dove, Scott Aaronson, Massachusetts Institute of Technology (United States); Timothy C. Ralph, Andrew G. White, The Univ. of Queensland (Australia) [8773-30]

9:30: **Photonic hybrid multidimensional systems and their application in fundamental quantum mechanics and quantum communication**, Vincenzo D'Ambrosio, Eleonora Nagali, Univ. degli Studi di Roma La Sapienza (Italy); Lorenzo Marrucci, Univ. degli Studi di Napoli Federico II (Italy); Fabio Sciarrino, Univ. degli Studi di Roma La Sapienza (Italy) [8773-31]

9:50: **Application of feed-forward in quantum phase gate and qubit state transfer**, Martina Mikova, Miloslav Dusek, Miroslav Jezek, Michal Micuda, Helena Fikeroval, Ivo Straka, Jaromír Fiurásek, Radim Filip, Palacky Univ. Olomouc (Czech Republic) [8773-32]

10:10: **Transmitting continuous variable entangled states over long distances**, Alberto Porzio, Consiglio Nazionale delle Ricerche (Italy) [8773-33]

Coffee Break Tue 10:30 to 11:00

Session 6

Room: Virgo Tue 11:00 to 12:40

Sources of Nonclassical States of Light

Session Chair: **Jaromír Fiurásek**,
Palacky Univ. Olomouc (Czech Republic)

11:00: **An extremely low-noise heralded single-photon source without temporal post-selection**, Fabrizio Piacentini, Istituto Nazionale di Ricerca Metrologica (Italy) [8773-34]

11:20: **Entangled photon generation on III-V semiconductor chip at room temperature**, Sara Ducci, Adeline Orioux, Guillaume Boucher, Andreas Eckstein, Aristide Lemaître, Pascal G. Filloux, Christophe Manquest, Thomas Coudreau, Ivan Favero, Giuseppe Leo, Univ. Paris 7-Denis Diderot (France); Arne Keller, Univ. Paris-Sud 11 (France); Perola Milman, Univ. Paris 7-Denis Diderot (France) [8773-35]

11:40: **High spatial entanglement via chirped quasi-phase-matched spontaneous parametric down-conversion**, Jiri Svazilik, ICFO - Institut de Ciències Fotòniques (Spain); Jan Perina Jr., Univ. Palackého V Olomouci (Czech Republic); Juan P. Torres, ICFO - Institut de Ciències Fotòniques (Spain) [8773-36]

12:00: **Spatially entangled 4-photon states**, Michiel J. A. de Dood, Martin P. van Exter, S. Cigdem Yorulmaz, Leiden Univ. (Netherlands) [8773-37]

12:20: **Generation of nonclassical light by nonlinear cavities**, Teppo Häyrynen, Jani Oksanen, Jukka Tulkki, Aalto Univ. School of Science and Technology (Finland) [8773-38]

Lunch/Exhibition Break Tue 12:40 to 14:00

Session 7

Room: Virgo Tue 14:00 to 16:40

Quantum Optics

Session Chair: **Jaromír Fiurásek**,
Palacky Univ. Olomouc (Czech Republic)

14:00: **Large controllable phase shift from a single trapped ion** (*Invited Paper*), Andreas Jechow, Univ. Potsdam (Germany) and Griffith Univ. (Australia); Erik W. Streed, Benjamin G. Norton, Sylvi Haendel, David Kielpinski, Griffith Univ. (Australia) [8773-39]

14:30: **Noiseless amplification of weak coherent fields without external energy**, Mikko P. J. Partanen, Teppo Häyrynen, Jani Oksanen, Jukka Tulkki, Aalto Univ. School of Science and Technology (Finland) [8773-46]

14:50: **Overcoming decoherence in the collapse and revival of spin Schrödinger cats**, Mark J. Everitt, Loughborough Univ. (United Kingdom); William J. Munro, NTT Basic Research Labs. (Japan); T. P. Spiller, Univ. of Leeds (United Kingdom) [8773-41]

Coffee Break Tue 15:10 to 15:40

15:40: **Matched propagation of Raman-resonant frequency chirped pulses, Schrödinger cats**, Mark J. Everitt, Gagik P. Djotyan, Wigner Research Ctr. for Physics of the H.A.S. (Hungary) [8773-42]

16:00: **Two-atom system as a directional frequency filter**, Vassilis E. Lembessis, Omar M. Aldossary, King Saud Univ. (Saudi Arabia); Zbigniew Ficek, King Abdulaziz City for Science and Technology (Saudi Arabia) [8773-43]

16:20: **Measurement of hyperfine splitting and determination of hyperfine structure constant of Cs 8S_{1/2} state by using of ladder-type EIT in Cs vapor cell**, Junmin Wang, Jie Wang, Huifeng Liu, Baodong Yang, Jun He, Shanxi Univ. (China) [8773-44]

Wednesday 17 April

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Influence of hydrostatic pressure on electronic states and optical properties of spherical quantum dots, Hovhannes K. H. Tevosyan, Russian-Armenian State Univ. (Armenia); David B. Hayrapetyan, Russian-Armenian State Univ. (Armenia) and State Engineering Univ. of Armenia (Armenia); Eduard M. Kazaryan, Russian-Armenian State Univ. (Armenia) [8773-45]

The simple theoretical analysis of quantum well wires superlattice (QWSL) of communication technology, Subhamoy Singha Roy, JIS College of Engineering (India) [8773-47]

Coherent cooling of atoms in a frequency-modulated standing laser wave, V. Yu Argonov, V.I. Il'ichev Pacific Oceanological Institute (Russian Federation) [8773-48]

Optical Sensors 2013

Conference Chairs: **Francesco Baldini**, Istituto di Fisica Applicata Nello Carrara (Italy); **Jiri Homola**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Robert A. Lieberman**, Intelligent Optical Systems, Inc. (United States)

Programme Committee: **Loïc J. Blum**, Univ. Claude Bernard Lyon 1 (France); **Eduard Brynda**, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic); **Artur Dybko**, Warsaw Univ. of Technology (Poland); **Guenter G. Gauglitz**, Eberhard Karls Univ. Tübingen (Germany); **Bo Liedberg**, Linköping Univ. (Sweden); **Aleksandra Lobnik**, Univ. of Maribor (Slovenia); **Claudia Preininger**, AIT Austrian Institute of Technology GmbH (Austria); **Reinhardt Willsch**, Institut für Photonische Technologien e.V. (Germany)

Monday 15 April

Opening Remarks

Room: Taurus **13:50 to 14:00**

Session 1

Room: Taurus **Mon 14:00 to 16:50**

Fiber Optic Sensors

Session Chair: **Francesco Baldini**,
Istituto di Fisica Applicata Nello Carrara (Italy)

14:00: **Two-dimensional hybrid metallo-dielectric nanostructures directly realized on the tip of optical fibers for sensing applications**, Alessio Crescitelli, Armando Ricciardi, Marco Consales, Univ. degli Studi del Sannio (Italy); Emanuela Esposito, Istituto di Cibernetica Eduardo Caianiello (Italy); Antonello Cutolo, Andrea Cusano, Univ. degli Studi del Sannio (Italy) [8774-1]

14:20: **Remote distributed optical fibre dose measuring of high gamma-irradiation with highly sensitive Al- and P-doped fibres**, Alexey V. Faustov, SCK CEN (Belgium) and Univ. de Mons (Belgium) and St. Petersburg State Polytechnical Univ. (Russian Federation); Andrei Gussarov, SCK CEN (Belgium); Marc Wuilpart, Univ. de Mons (Belgium); Andrei A. Fotiadi, Univ. de Mons (Belgium) and Ioffe Physico-Technical Institute (Russian Federation) and Ulyanovsk State Univ. (Russian Federation); Leonid B. Liokumovich, St. Petersburg State Polytechnical Univ. (Russian Federation); Igor O. Zolotovskiy, Ulyanovsk State Univ. (Russian Federation); Alexandr L. Tomashuk, Fiber Optics Research Ctr. (Russian Federation) and Ulyanovsk State Univ. (Russian Federation); T. de Schoutheete, Laborelec (Belgium); Patrice Mégret, Univ. de Mons (Belgium) [8774-2]

14:40: **Nanoliter-scale, regenerable ion sensor: sensing with surface functionalized microstructured optical fiber**, Sabrina Heng, Mai-Chi Nguyen, Roman Kostecki, Tanya M. Monro, Andrew D. Abell, The Univ. of Adelaide (Australia) [8774-3]

15:00: **Influence of the lamination process on the plastic optical fiber sensors embedded in composite materials**, Piotr Lesiak, Mateusz Szlag, Michal Kuczowski, Stefan Awietjan, Slawomir Ertman, Daniel Budaszewski, Andrzej W. Domanski, Tomasz R. Wolinski, Warsaw Univ. of Technology (Poland) [8774-4]

Coffee Break Mon 15:20 to 15:50

15:50: **Inscription of first order Fiber Bragg Gratings in sapphire fibers by 400 nm femtosecond laser pulses**, Tino Elsmann, Tobias Habisreuther, Albrecht Graf, Manfred Rothhardt, Hartmut Bartelt, Institut für Photonische Technologien e.V. (Germany) [8774-5]

16:10: **Spectral-domain measurement of polarimetric sensitivity of a side-hole fiber to temperature and hydrostatic pressure**, Petr Hlubina, Technical Univ. of Ostrava (Czech Republic); Jacek M. Olszewski, Tadeusz Martynkien, Wrocław Univ. of Technology (Poland); Pawel Mergo, Univ. Marii Curie-Skłodowskiej (Poland); Wacław Urbanczyk, Wrocław Univ. of Technology (Poland) [8774-6]

16:30: **Multianalyte detection using fiber optic particle plasmon resonance sensor based on plasmonic light scattering interrogation**, Hsing-Ying Lin, Chen-Han Huang, National Cheng Kung Univ. (Taiwan) [8774-7]

Tuesday 16 April

Session 2

Room: Taurus **Tue 8:30 to 12:20**

Optical Biosensors I

Session Chair: **Jiri Homola**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

8:30: **Raman and surface-enhanced Raman scattering (SERS) biosensing** (*Invited Paper*), Marek Prochazka, Charles Univ. in Prague (Czech Republic) [8774-8]

9:00: **Raman-spectroscopy-based biosensing for applications in ophthalmology**, Giulia Rusciano, Paola Capriglione, Giuseppe Pesce, Gianluigi Zito, Antonio Sasso, Antonio Del Prete, Giovanni Cennamo, Univ. degli Studi di Napoli Federico II (Italy) [8774-9]

9:20: **Surface-enhanced Raman imaging of red blood cell membrane with highly uniform active substrates obtained using block copolymers self-assembly**, Gianluigi Zito, Anna Malafronte, Alden Dochshanov, Giulia Rusciano, Finizia Auriemma, Giuseppe Pesce, Claudio De Rosa, Antonio Sasso, Univ. degli Studi di Napoli Federico II (Italy) [8774-10]

9:40: **Optical biosensor system with integrated microfluidic sample preparation and TIRF based detection**, Eduard Gilli, Sylvia R. Scheicher, Michael Suppan, Heinz Pichler, Markus Rumpler, Valentin Satzinger, Christian Palfinger, Frank Reil, Martin Hajsek, Stefan Köstler, JOANNEUM RESEARCH Forschungsgesellschaft mbH (Austria) [8774-11]

Coffee Break Tue 10:00 to 10:30

10:30: **Plasmon-enhanced microcavity biosensing** (*Invited Paper*), Frank Vollmer, Max Planck Institute for the Science of Light (Germany) [8774-12]

11:00: **High-performance biosensing on gold nanoparticle arrays**, Barbora Spackova, Nicholas S. Lynn Jr., Milan Vala, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Pavel Kwiecien, Ivan Richter, Czech Technical Univ. in Prague (Czech Republic); Jiri Homola, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8774-13]

11:20: **Electrochemical surface plasmon resonance biosensor for study of DNA desorption and hybridization**, Luca Ferrari, Univ. degli Studi di Modena e Reggio Emilia (Italy); Hana Šípová, Ivo Tichý, Karel Chadt, Jiri Homola, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8774-14]

11:40: **High Q optical nanobeam cavities for label-free sensing**, Muhammad Ghazali Abdul Rahman, Philippe V. F. Velha, Richard M. De La Rue, Nigel P. Johnson, Univ. of Glasgow (United Kingdom) [8774-15]

12:00: **Optical sensors for therapeutic drug monitoring of antidepressants for a better medication adjustment**, Anne K. Krieg, Günter G. Gauglitz, Eberhard Karls Univ. Tübingen (Germany); Stefan Hess, University of Tuebingen (Germany) [8774-16]

Lunch/Exhibition Break Tue 12:20 to 13:50

Session 3

Room: Taurus **Tue 13:50 to 15:20**

Novel Materials and Functionalizations

Session Chair: **Francesco Baldini**,
Istituto di Fisica Applicata Nello Carrara (Italy)

13:50: **Recognition as a challenge in label-free optical sensing** (*Invited Paper*), Günter G Gauglitz, Eberhard Karls Univ. Tübingen (Germany) [8774-17]

14:20: **Optical biosensors for the label-free detection in complex biological media**, Eduard Brynda, Tomáš Riedel, Adrés de los Santos Pereira, Cesar Rodriguez-Emmenegger, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic) [8774-18]

14:40: **UV-light-assisted functionalization for sensing of light molecules**, Riccardo Funari, Univ. degli Studi di Napoli Federico II (Italy); Bartolomeo Della Ventura, Università degli studi di Roma "La Sapienza" (Italy); Antonio Ambrosio, Stefano Lettieri, CNR-SPIN (Italy); Pasqualino Maddalena, Univ. degli Studi di Napoli "Federico II" (Italy) and CNR-SPIN (Italy); Carlo Altucci, Raffaele Velotta, Univ. degli Studi di Napoli Federico II (Italy) [8774-19]

15:00: **Optical sensors based on metal oxide nanowires for UV/IR detection**, Jose Luis Pau Vizcaino, Carlos García Nuñez, Antonio García Marín, Eduardo Ruiz, Juan Piqueras, Univ. Autónoma de Madrid (Spain) [8774-21]

Coffee Break Tue 15:20 to 16:00

Session 4

Room: Taurus **Tue 16:00 to 17:00**

Optical Biosensors II

Session Chair: **Eduard Brynda**, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic)

16:00: **Surviving mRNA detection by means of optical fiber nanotips coated with molecular beacons**, Ambra Giannetti, Andrea Barucci, Sara Tombelli, Cosimo Trono, Franco Cosi, Istituto di Fisica Applicata Nello Carrara (Italy); Giancarlo C. Righini, Istituto di Fisica Applicata Nello Carrara (Italy) and Museo Storica della Fisica e Ctr Studi e Ricerche Enrico Fermi (Italy); Stefano Pelli, Francesco Baldini, Istituto di Fisica Applicata Nello Carrara (Italy) [8774-22]

16:20: **Feasibility study of an IgG/anti-IgG label-free bioassay based on long period grating**, Francesco Chiavaioli, Francesco Baldini, Cosimo Trono, Ambra Giannetti, Massimo Brenici, Riccardo Falciai, Istituto di Fisica Applicata Nello Carrara (Italy) [8774-23]

16:40: **Electric charge measurements of a single bacterial spore**, Giuseppe Pesce, Giulia Rusciano, Antonio Sasso, Univ. degli Studi di Napoli Federico II (Italy) [8774-24]

Wednesday 17 April

Session 5

Room: Taurus Wed 9:00 to 10:00

Integrated Optical Sensors

Session Chair: **Günter G. Gauglitz**,
Eberhard Karls Univ. Tübingen (Germany)

9:00: **Basic structures of integrated photonic circuits for smart biosensor applications**, Susette Germer, Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany); Charaf A. Cherkouk, Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany); Lars Rebohle, Manfred Helm, Wolfgang Skorupa, Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany) [8774-25]

9:20: **Photoinduced absorption measurement on a microchip equipped with organic dye-doped polymer waveguide**, Takashi Kawaguchi, Kouji Nagai, Kenichi Yamashita, Kyoto Institute of Technology (Japan) [8774-26]

9:40: **Lab on fiber by using the breath figure technique**, Marco Pisco, Giuseppe Quero, Univ. degli Studi del Sannio (Italy); Agostino Iadicicco, Univ. degli Studi di Napoli Parthenope (Italy); Michele Giordano, Francesco Galeotti, Consiglio Nazionale delle Ricerche (Italy); Andrea Cusano, Univ. degli Studi del Sannio (Italy) [8774-27]

Coffee Break Wed 10:00 to 10:30

Session 6

Room: Taurus Wed 10:30 to 11:30

Interferometric Sensors

Session Chair: **Marek Prochazka**,
Charles Univ. in Prague (Czech Republic)

10:30: **Migrating the Mach-Zehnder chemical and bio-sensor to the mid-infrared region**, Lothar Leidner, Melanie Ewald, Eberhard Karls Univ. Tübingen (Germany); Markus Sieger, Boris Mizaikoff, Univ. Ulm (Germany); Günter G. Gauglitz, Eberhard Karls Univ. Tübingen (Germany) [8774-28]

10:50: **Differential length measurement using low-coherence tandem interferometry**, Martin D. Smith, William N. MacPherson, Robert R. J. Maier, Heriot-Watt Univ. (United Kingdom) [8774-29]

11:10: **New optical probe approach using mixing effect in planar photodiode for biomedical applications**, Tania Pereira, Pedro Vaz, Tatiana Oliveira, Ines Santos, Adriana Leal, Vania Almeida, Helena Pereira, Carlos Manuel B. A. Correia, João M. R. Cardoso, Univ. de Coimbra (Portugal) [8774-30]

Session 7

Room: Taurus Wed 11:30 to 12:10

Advanced Components

Session Chair: **Marek Prochazka**,
Charles Univ. in Prague (Czech Republic)

11:30: **Amorphous silicon balanced photodiode for microfluidic applications**, Domenico Caputo, Giampiero de Cesare, Riccardo Scipinotti, Augusto Nascetti, Univ. degli Studi di Roma La Sapienza (Italy) [8774-31]

11:50: **Performances of amorphous silicon photodiodes integrated in chemiluminescence based -TAS**, Domenico Caputo, Giampiero de Cesare, Massimo Nardini, Riccardo Scipinotti, Univ. degli Studi di Roma La Sapienza (Italy); Luisa S. Dolci, Mara Mirasoli, Aldo Roda, Univ. degli Studi di Bologna (Italy); Augusto Nascetti, Univ. degli Studi di Roma La Sapienza (Italy) [8774-32]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Mesoporous silica as the enzyme carrier for organophosphate detection and/or detoxification, Nina Frančič, Aleksandra Lobnik, University of Maribor, Faculty of Mechanical Engineering (Slovenia) [8774-20]

Diagnostic of Epstein-Barr virus infection in clinical serum samples by SPR, Tomáš Riedel, Cesar Rodriguez Emmenegger, Andrés de los Santos Pereira, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic); Anna Bedajankova, VIDIA spol. s ro (Czech Republic); Eduard Brynda, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic) [8774-33]

Block copolymer brushes for antifouling functionalizable sensing surfaces, Andrés de los Santos Pereira, Cesar Rodriguez-Emmenegger, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic); Aldo B. Alles, Univ. de la República (Uruguay); Eduard Brynda, Institute of Macromolecular Chemistry of the ASCR, v.v.i. (Czech Republic) [8774-34]

A Microfluidic Platform with a Flow-Balanced Fluidic Network for Osteoarthritis Diagnosis, Kangil Kim, Yoo Min Park, Hyun C. Yoon, Sang Sik Yang, Ajou Univ. (Korea, Republic of) [8774-35]

Nanoplasmonic sensor for chemical measurements, Renato Iovine, Luigi La Spada, Lucio Vegni, Univ. degli Studi di Roma Tre (Italy) [8774-36]

Highly reproducible substrate for surface-enhanced Raman spectroscopy exploiting block copolymer self-assembly, Claudia Diletto, Univ. degli Studi di Napoli Federico II (Italy); Pasquale Morvillo, ENEA (Italy); Claudio De Rosa, Finizia Auriemma, Giulia Rusciano, Antonio Sasso, Univ. degli Studi di Napoli Federico II (Italy) [8774-37]

Optical biosensor based on cadmium sulfide-silver nanoplate hybrid structure, Shang Xin Lin, Huaqiao Univ. (China); Alex C. Wong, David S. Siu, Edwin Y. Pun, City Univ. of Hong Kong (Hong Kong, China) [8774-38]

Simulation of continuously logical ADC (CL ADC) of photocurrents as a basic cell of image processor and multichannel optical sensor systems, Vladimir G. Krasilenko, Vinnitsa Social Economy Institute (Ukraine); Aleksandr I. Nikolskiy, Alexander A. Lazarev, Vinnytsia National Technical Univ. (Ukraine); Oksana V. Krasilenko, National Aviation Univ. (Ukraine); Irina A. Krasilenko, Vinnitsa Social Economy Institute (Ukraine) [8774-39]

The arms arrangement influence on the sensitivity of Mach-Zehnder fiber optic interferometer, Stanislav Kepak, Jakub Cubik, Jan Dorcak, Vladimir Vasinek, Andrej Liner, Martin Papes, Petr Siska, Technical Univ. of Ostrava (Czech Republic) [8774-41]

Rock massive temperature changes measurement with regard to thermal responses generated by a thermal response test device, Jan Latal, Jan Vitasek, Petr Koudelka, Petr Siska, Andrej Liner, Martin Papes, Vladimir Vasinek, Technical Univ. of Ostrava (Czech Republic) [8774-42]

Development of absorption fiber optic sensor for distributed measurement of ammonia gas, Jan Aubrecht, Ladislav Kalvoda, Czech Technical Univ. in Prague (Czech Republic) [8774-43]

Usage of Raman DTS for wooden material analysis, Vladimir Vasinek, Jan Latal, Petr Koudelka, Andrej Liner, Martin Papes, Vladimira Rasnerova, Technical Univ. of Ostrava (Czech Republic) [8774-44]

Highly sensitive BOTDR demodulation method based on slow-light MZI, Yong Zhao, Bo Han, Qi Wang, Chuan Qin, Northeastern Univ. (China) [8774-45]

Assay for optical determination of biogenic amines using microtiterplates, Polona Nedeljko, Matejka Turel, Institute for Environmental Protection and Sensors, Ltd. (Slovenia); Aleksandra Lobnik, Institute for Environmental Protection and Sensors, Ltd. (Slovenia) and Univ. of Maribor (Slovenia) [8774-46]

Analysis of fano-line shapes from agile resonant waveguide grating sensors using correlation techniques, Kristelle Bougot-Robin, Weijia Wen, Hong Kong Univ. of Science and Technology (Hong Kong, China); Henri Benisty, Lab. Charles Fabry (France) [8774-47]

Vibration sensor using fiber optic coupler, Kishore Putha, Dinakar Dantala, Vengalrao Pachava, Srimannarayana Kamineni, National Institute of Technology, Warangal (India) [8774-49]

Spectral interferometry-based surface plasmon resonance sensing of liquid analyte refractive index change, Dalibor Ciprian, Petr Hlubina, Jiří Lužáček, Technical Univ. of Ostrava (Czech Republic) [8774-50]

Reflectance of various porous silicon structures at molecular adsorption, Igor Iatsunskyi, Valentin Smyntyna, Nykolai Pavlenko, Olga Kanevska, Valera Myndrul, Odessa I.I. Mechnikov National Univ. (Ukraine) [8774-51]

Study and design of an optode for pH measurement, Denis M. G. Doizi, Mathias Fages, Guy Deniau, CEA (France) [8774-52]

Hybrid interfaces for a new class of optical biosensors, Luca De Stefanò, Monica Terracciano, Jane Politi, Alessandro Caliò, Ilaria Rea, Ivo Redina, Istituto per la Microelettronica e Microsistemi (Italy); Paola Giardina, University of Naples "Federico II" (Italy) [8774-53]

Detection and localization of building insulation faults using optical fiber DTS system, Martin Papes, Andrej Liner, Petr Koudelka, Petr Siska, Jakub Cubik, Stanislav Kepak, Vladimir Vasinek, Technical Univ. of Ostrava (Czech Republic) [8774-54]

Electromagnetic study of magneto-optic surface plasmon resonance effects for biosensing applications, Abdul Aleem Jamali, Sebastian Kübler, Univ. Kassel (Germany); Nicolas Mücklich, Institute of Physics, CINsAT, Univ. of Kassel (Germany); Bernd Witzigmann, Univ. Kassel (Germany); Arno Ehresmann, Univ. of Kassel (Germany) [8774-55]

Compact and cost effective instrument for detecting drug precursors in different environments based on fluorescence polarization, Juan C. Antolín Urbaneja, Iñigo Eguizabal, Nerea Briz, Alberto Dominguez, Patxi Estensoro, TECNALIA Research & Innovation (Spain); Alberto Secchi, SELEX Sistemi Integrati S.p.A. (Italy); Antonio Varriale, Consiglio Nazionale delle Ricerche (Italy); Stefano Di Giovanni, Laboratory for Molecular Sensing, IBP-CNR (Italy); Sabato D'Auria, Consiglio Nazionale delle Ricerche (Italy) [8774-56]

Tubular optical waveguide particle plasmon resonance biosensor for multiplex real-time and label-free detection, Chen-Han Huang, Hsing-Ying Lin, National Cheng Kung Univ. (Taiwan). [8774-57]

Comparison of optical and electrical investigations of meat ageing, Elena Prokopyeva, Pavel Tomanek, Brno Univ. of Technology (Czech Republic); Lucie Kocová, Tomáš Palai-Dany, Zdeněk Balík, Pavel Škarvada, Lubomír Grmela, Brno Univ of Technology (Czech Republic) [8774-58]

A new hyperspectral imaging based device for quality control in plastic recycling, Giuseppe Bonifazi, Univ. degli Studi di Roma La Sapienza (Italy); Maurizio D'Agostini, Alberto Dall'Ava, DV srl (Italy); Silvia Serranti, Univ. degli Studi di Roma La Sapienza (Italy); Fabio Turioni, DV srl (Italy) [8774-59]

Quality control in the recycling stream of PVC from window frames by hyperspectral imaging, Valentina Luciani, Silvia Serranti, Giuseppe Bonifazi, Univ. degli Studi di Roma La Sapienza (Italy); Francesco Di Maio, Technische Univ. Delft (Netherlands); Peter C. Rem, Delft Univ. of Technology (Netherlands) [8774-60]

Optical diagnostics of ZrON/Si thin films formed by oxidation/nitridation of zirconium metal, Victor V. Atuchin, Vladimir Kruchinin, A.V. Rzhhanov Institute of Semiconductor Physics (Russian Federation); Cheong Kuan Yew, Univ. of Malaya (Malaysia); Yew Hoong Wong, Univ. Sains Malaysia (Malaysia) [8774-61]

Polymer planar Bragg grating for sensing applications, Manuel Rosenberger, Univ. of Applied Sciences Aschaffenburg (Germany); N. Hartlaub, Applied Laser and Photonics Group, Univ. of Applied Sciences Aschaffenburg (Germany); Georg Koller, Stefan Belle, Univ. of Applied Sciences Aschaffenburg (Germany); Bernhard Schmauss, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany); Ralf Hellmann, Univ. of Applied Sciences Aschaffenburg (Germany) [8774-62]

Low noise omnidirectional optical receiver for the mobile FSO networks, Karel Witas, Stanislav Hejduk, Vladimir Vasinek, Jan Vitasek, Jan Latal, Technical Univ. of Ostrava (Czech Republic) [8774-63]

Monte Carlo simulation of spatial reflectance pattern of translucent material with subsurface structure, Harri J. Juttula, Anssi J. Mäkynen, Univ. of Oulu (Finland) [8774-64]

PCF interferometer based temperature sensor with high sensitivity, Fernando C. Fávero, Ron Spittel, Manfred Rothhardt, Jens Kobelke, Hartmut Bartelt, Institut für Photonische Technologien e.V. (Germany) [8774-65]

Coupling conditions for quasi-single mode optical fibers with different refractive index profile, Petr Siska, Jan Latal, Petr Koudelka, Jan Vitasek, Technical Univ. of Ostrava (Czech Republic); Ivan Kasik, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Vladimir Vasinek, Technical Univ. of Ostrava (Czech Republic) [8774-66]

Design and in-flight performance of ZY-3 satellites cameras, Hongyan He, Weijun Gao, China Academy of Space Technology (China) [8774-67]

Sensitivity of Wood-Rayleigh anomalies in metallic nanogratings, Armando Ricciardi, Univ. degli Studi del Sannio (Italy); Silvio Savoia, Univ. degli Studi del Sannio (Italy) and Waves Group (Italy); Alessio Crescitelli, Univ. degli Studi del Sannio (Italy); Emanuela Esposito, Istituto di Cibernetica Eduardo Caianiello (Italy); Vincenzo Galdi, Andrea Cusano, Univ. degli Studi del Sannio (Italy) [8774-69]

Measurement of magnetic circular dichroism loss in a ring laser, Zhiguo Wang, Jie Yuan, Fei Wang, Guangzong Xiao, Xiaochun Liu, National Univ. of Defense Technology (China) [8774-70]

Numerical analysis of diffraction loss characteristics in nonplanar ring resonator, Zhiguo Wang, National Univ. of Defense Technology (China); Jie Jie Yuan, NUDT (China); Xiaohu Liu, Fei Wang, Guangzong Xiao, National Univ. of Defense Technology (China) [8774-71]

Micro-structured and Specialty Optical Fibres II

Conference Chairs: **Kyriacos Kalli**, Cyprus Univ. of Technology (Cyprus); **Jiri Kanka**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Alexis Mendez**, MCH Engineering LLC (United States)

Programme Committee: **Jean-Luc Adam**, Univ. de Rennes 1 (France); **John Ballato**, Advanced Materials Ctr. (United States); **Ole Bang**, Technical Univ. of Denmark (Denmark); **Hartmut Bartelt**, Institut für Photonische Technologien e.V. (Germany); **Aurelien Bergonzo**, Draka (France); **Neil G. R. Broderick**, The Univ. of Auckland (New Zealand); **Benjamin J. Eggleton**, The Univ. of Sydney (Australia); **Christopher Emslie**, Fibrecore Ltd. (United Kingdom); **Sébastien Février**, XLIM Institut de Recherche (France); **Jonathan C. Knight**, Univ. of Bath (United Kingdom); **Michael Z. Komodromos**, Frederick Institute of Technology (Cyprus); **Hanne Ludvigsen**, Aalto Univ. School of Science and Technology (Finland); **Walter Margulis**, Acreo AB (Sweden); **Saeed Rehman**, Fibertronix AB (Sweden); **Valerio Romano**, Berner Fachhochschule Technik und Informatik (Switzerland); **Kay Schuster**, Institut für Photonische Technologien e.V. (Germany); **Waclaw Urbanczyk**, Wroclaw Univ. of Technology (Poland); **David J. Webb**, Aston Univ. (United Kingdom); **Alexei M. Zheltikov**, Lomonosov Moscow State Univ. (Russian Federation)

Monday 15 April

Opening Remarks

Room: Stella 13:25 to 13:30

Session 1

Room: Stella Mon 13:30 to 15:20

Specialised Fibre Sensors and Sensing I

Session Chair: **Kyriacos Kalli**, Cyprus Univ. of Technology (Cyprus)

13:30: **DNA biosensors implemented on PNA-functionalized microstructured optical fibers Bragg gratings** (*Invited Paper*), Alessandro Candiani, Sara Giannetti, Annamaria Cucinotta, Alessandro Bertucci, Roberto Corradini, Univ. degli Studi di Parma (Italy); Maria Konstantaki, Foundation for Research and Technology-Hellas (Greece); Walter Margulis, Acreo AB (Sweden); Stavros Pissadakis, Foundation for Research and Technology-Hellas (Greece); Stefano Sella, Univ. degli Studi di Parma (Italy) [8775-1]

14:00: **Exposed-core chalcogenide microstructured optical fibers for chemical sensing**, Johann Trolés, Perrine Toupin, Univ de Rennes 1 (France); Laurent Brilland, PERFOS (France); Catherine Boussard-Plédel, Bruno Bureau, Univ. de Rennes 1 (France); Shuo Cui, University of Rennes (France); David Méchin, PERFOS (France); Jean-Luc Adam, Univ. de Rennes 1 (France) [8775-2]

14:20: **Competitive Raman gain and signal attenuation in PCF: an integrated theoretical and experimental study using SERS nanotags**, Polina Pinkhasova, Svetlana A. Sukhishvili, Henry H. Du, Stevens Institute of Technology (United States); Jiri Kanka, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8775-3]

14:40: **Polarization maintaining evanescent field sensor for measuring liquid refractive index change**, Rim Cherif, Amine Ben Salem, Mourad Zghal, SUP'COM (Tunisia) [8775-4]

15:00: **Photonic crystal fiber coil sensor for water-depth sensing**, Chin-Ping Yu, Chen-Feng Fan, National Sun Yat-Sen Univ. (Taiwan) [8775-5]

Coffee Break Mon 15:20 to 15:50

Session 2

Room: Stella Mon 15:50 to 17:10

Novel Fibre Manufacture

Session Chair: **Michael Komodromos**, Frederick Institute of Technology (Cyprus)

15:50: **Mid-infrared supercontinuum generation in chalcogenide and tellurite suspended core fibers**, Frederic Desevedavy, Inna Savelii, Ousama Mouawad, Jean-Charles Jules, Grégory Gadret, Bertrand Kibler, Julien Fatome, Pierre-Yves Bony, Jérémy Picot-Clemente, Clement Strutyński, Univ. de Bourgogne (France); Hiroyasu Kawashima, Weiqing Gao, Tomas Kohoutek, Takenobu Suzuki, Yasutake Ohishi, Toyota Technological Institute (Japan); Frédéric Smektala, Univ. de Bourgogne (France) [8775-6]

16:10: **Preparation and characterization of Bragg fibers with air cores for transfer of laser radiation**, Vlastimil Matejec, Ivan Kasik, Ondrej Podrazky, Jan Aubrecht, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Michal Frank, Michal Jelinek M.D., Václav Kubecek, Czech Technical Univ. in Prague (Czech Republic) [8775-7]

16:30: **The influence of nanostructured optical fiber core matrix on the optical properties of EDFA**, Jakub Cajzl, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) and Institute of Chemical Technology (Czech Republic); Ondrej Podrazky, Jan Mrázek, Jan Aubrecht, Vlastimil Matejec, Pavel Peterka, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Pavla Nekvindová, Institute of Chemical Technology (Czech Republic); Ivan Kasik, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8775-8]

16:50: **Large core Yb-doped optical fiber through vapor phase doping technique**, Maitreyee Saha, Atasi Pal, Mrinmay Pal, Ranjan Sen, Central Glass and Ceramic Research Institute (India) [8775-9]

Tuesday 16 April

Session 3

Room: Stella Tue 8:50 to 10:20

Characterisation, Measurements, and Metrology

Session Chair: **Jiri Kanka**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

8:50: **Silica-based UV-fibers for DUV applications: current status** (*Invited Paper*), Karl-Friedrich Klein, Cornell P Gonschior, Technische Hochschule Mittelhessen (Germany); Hanns S Eckhardt, Tec 5 (Germany); Moritz B Klein, TransMIT GmbH (Germany); Valery Khalilov, John Shannon, MOLEX - Polymicro (United States) [8775-10]

9:20: **Generation of optical frequency combs in fibres**, Marina Zajnulina, Jose Manuel Chavez Boggio, Leibniz-Institut für Astrophysik Potsdam (Germany); Andres A. Rieznik, Instituto Tecnológico de Buenos Aires (Argentina) and Consejo Nacional de Investigaciones Científicas y Técnicas (Argentina); Roger Haynes, Martin M. Roth, Leibniz-Institut für Astrophysik Potsdam (Germany) [8775-11]

9:40: **Effect of pump wavelength on self-induced laser line sweeping in Yb-doped fiber laser**, Petr Navratil, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) and Czech Technical Univ. in Prague (Czech Republic); Pavel Peterka, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Václav Kubecek, Czech Technical Univ. in Prague (Czech Republic) [8775-12]

10:00: **Characterisation of optical pulses travelling through a photonic crystal fibre using Fourier-transform spectral interferometry**, Timea Grósz, Miklós Kiss, Attila P. Kovács, Univ. of Szeged (Hungary) [8775-13]

Coffee Break Tue 10:20 to 10:50

Session 4

Room: Stella Tue 10:50 to 12:10

Advancements in Micro-optic Components

Session Chair: **Alexis Mendez**, MCH Engineering LLC (United States)

10:50: **Numerical analysis of rocking filters fabricated in microstructured birefringent fibers**, Jacek M. Olszewski, Alicja Anuszkiewicz, Waclaw Urbanczyk, Wroclaw Univ. of Technology (Poland) [8775-14]

11:10: **Coherent super-position of multiple beams in a large mode area fiber**, Joseph W. Haus, Long Wang, Peter E. Powers, Andrew M. Sarangan, Univ. of Dayton (United States) [8775-15]

11:30: **Optimizing microfabricated liquid planar waveguides for microfluidic lab-on-chip flow cytometry systems**, James Hoyland, Casper Kunstmann-Olsen, Horst-Günter Rubahn, Univ. of Southern Denmark (Denmark) [8775-16]

11:50: **Special optical fibers and fiber capillaries coated with Indium-Tin-Oxide**, Volodymyr Bobusky, Jan Mrázek, Ondrej Podrazky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8775-18]

Lunch/Exhibition Break Tue 12:10 to 13:30

Session 5

Room: Stella Tue 13:30 to 15:20

Modelling and Numerical Analysis

Session Chair: **Jiri Kanka**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

13:30: **Dispersion characteristics of plasmonic waveguides for THz waves** (*Invited Paper*), Christos Markides, Frederick Institute of Technology (Cyprus); Charusluk Viphavakit, Frederick Univ. (Cyprus); Christos Themistos, Michael Komodromos, Frederick Institute of Technology (Cyprus); Kyriacos Kalli, Cyprus Univ. of Technology (Cyprus); Anita Quadir, Azizur Rahman, City Univ. London (United Kingdom). [8775-19]

14:00: **Self-similar pulse shape mode for femtosecond pulse propagation in optical fiber with multi-photon absorption and nonlinear refraction**, Vyacheslav A. Trofimov, Irina G. Zakharova, Dmitry A. Smotrov, Lomonosov Moscow State Univ. (Russian Federation); Sheng Lan, South China Normal Univ. (China) [8775-20]

14:20: **Pressure-driven and other flows in microstructure optical fibres for microfluidics**, Paul Christodoulides, G. Florides, Charalambos Koutsides, L. Lazari, Cyprus Univ. of Technology (Cyprus); Michael Komodromos, Frederick Institute of Technology (Cyprus); Frederic Dias, Ecole Normale Supérieure de Cachan (France); Kyriacos Kalli, Cyprus Univ. of Technology (Cyprus) ... [8775-21]

14:40: **Broadband submicron flattened dispersion compensating fiber with asymmetrical fluoride doped core**, Michal Lucki, Richard Zeleny, Czech Technical Univ. in Prague (Czech Republic) [8775-22]

15:00: **Comparison of thermally induced single-mode regime changes in Yb-doped large mode area photonic crystal fibers**, Enrico Coscelli, Federica Poli, Riyadh Mwad Naife, Annamaria Cucinotta, Stefano Selleri, Univ. degli Studi di Parma (Italy). [8775-23]

Coffee Break Tue 15:20 to 15:50

Session 6

Room: Stella Tue 15:50 to 18:00

Specialised Fibre Sensors and Sensing II

Session Chair: **Kyriacos Kalli**, Cyprus Univ. of Technology (Cyprus)

15:50: **Embedded fibre Bragg gratings in photonic crystal fibres for cure cycle monitoring of carbon fibre reinforced polymer materials** (*Invited Paper*), Camille Sonnenfeld, Vrije Univ. Brussel (Belgium) and Univ. de Caen Basse-Normandie (France); Geert Luyckx, Univ. Gent (Belgium); Francis Collombet, Univ. de Toulouse (France); Yves-Henri Grunevald, Composites, Expertise & Solutions (France); Bernard Douchin, Laurent Crouzeix, Mauricio Torres, Univ. de Toulouse (France); Thomas Geernaert, Sanne Sulejmani, Vrije Univ. Brussel (Belgium); Karima Chah, Univ. de Mons (Belgium); Pawel Mergo, Univ. Marii Curie-Skłodowskiej (Poland); Hugo Thienpont, Francis Berghmans, Vrije Univ. Brussel (Belgium); Sophie Eve, Moussa Gomina, ENSICAEN (France). [8775-24]

16:20: **Rocking filters fabricated in side-hole fiber with zero group birefringence**, Alicja Anuszkiewicz, Tadeusz Martynkien, Jacek M. Olszewski, Wroclaw Univ. of Technology (Poland); Paweł Mergo, Univ. Marii Curie-Skłodowskiej (Poland); Waclaw Urbanczyk, Wroclaw Univ. of Technology (Poland) [8775-25]

16:40: **High-sensitivity high-resolution refractometry with twin turn-around-point long-period gratings in a photonic crystal fiber**, Jiri Kanka, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8775-26]

17:00: **Potential for broad range multiplexing of fibre Bragg gratings in polymer optical fibres and operation in the 700-nm wavelength range**, Lutful Khan, Aston Institute of Photonic Technologies Chapter (United Kingdom); David J. Webb, Aston Univ. (United Kingdom); Kyriacos Kalli, Cyprus Univ. of Technology (Cyprus) [8775-27]

17:20: **Simultaneous measurement of liquid level and temperature using non uniform grating**, Dipankar Sengupta, M. Sai Shankar, Srimannarayana Kamineni, National Institute of Technology, Warangal (India) [8775-28]

17:40: **Thermoluminescence characteristic of flat optical fiber in radiation dosimetry under different electron irradiation conditions**, Alawiah Ariffin, Multimedia Univ. (Malaysia); Sabar Bauk, Univ. Sains Malaysia (Malaysia); Hairul Azhar Abdul Rashid, Multimedia Univ. (Malaysia); Nizam Tamchek, Univ. Putra Malaysia (Malaysia); Faisal Rafiq Mahamd Adikan, Univ. of Malaya (Malaysia); Khairul Anuar Mat Shariff, Mohd. Imran Zulkifli, Shahrin Zen Muhammad Yasin, Telekom Research and Development (Malaysia); Ghafour Amouzad Mahdiraji, Univ. of Malaya (Malaysia); Wan Saffiey Wan Abdullah, Malaysian Nuclear Agency (Malaysia); Zulfadzli Yusoff, Mohd. Ridzuan Mokhtar, Multimedia Univ. (Malaysia); David Bradley, Univ. of Surrey (United Kingdom); N. M. Noor, Univ. Putra Malaysia (Malaysia). [8775-29]

Wednesday 17 April

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Radiation dose to radiosensitive organs in pet myocardial perfusion examination using versatile optical fibres, Salasiah Mustafa, Muhammad Hishar Hassan, Abdul Jalil Nordin, Fathinul Fikri Ahmad, Nizam Tamchek, Univ. Putra Malaysia (Malaysia); Hairul Azhar Abdul Rashid, Multimedia Univ. (Malaysia); Noramaliza Mohd Noor, Univ. Putra Malaysia (Malaysia) [8775-30]

Double-clad rare-earth-doped fiber with cross-section tailored for splicing to the pump and signal fibers: analysis of pump propagation, Pavel Koska, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) and Czech Technical Univ. in Prague (Czech Republic); Pavel Peterka, Ivan Kasik, Vlastimil Matejec, Ondrej Podrazky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8775-31]

Compositional and structural dependence of chromatic dispersion in tellurite microstructured optical fibers, Zhongchao Duan, Hoang Tuan Tong, Meisong Liao, Dinghuan Deng, Takenobu Suzuki, Yasutake Ohishi, Toyota Technological Institute (Japan) [8775-32]

Measurement of chromatic dispersion and dispersion slope of fiber using a supercontinuum source, Miroslava Kadulová, Petr Hlubina, Technical Univ. of Ostrava (Czech Republic); Ryszard R. Buczynski, Univ. of Warsaw (Poland) [8775-33]

Broadband dispersion decreasing photonic crystal fiber for compression of optical pulses, Richard Zeleny, Michal Lucki, Czech Technical Univ. in Prague (Czech Republic) [8775-34]

Holography: Advances and Modern Trends III

Conference Chairs: **Miroslav Hrabovsky**, Palacky Univ. Olomouc (Czech Republic); **John T. Sheridan**, Univ. College Dublin (Ireland); **Antonio Fimia-Gil**, Univ. Miguel Hernández de Elche (Spain)

Programme Committee: **Radim Chmelik**, Brno Univ. of Technology (Czech Republic); **Milos Kopecky**, Institute of Physics of the ASCR, v.v.i. (Czech Republic); **Libor Kotacka**, Optaglio s.r.o. (Czech Republic); **Miroslav Miler**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Dagmar Senderáková**, Comenius Univ. in Bratislava (Slovakia); **Mitsuo Takeda**, The Univ. of Electro-Communications (Japan); **Vladimir Yu. Venediktov**, S.I. Vavilov State Optical Institute (Russian Federation); **Przemyslaw W. Wachulak**, Military Univ. of Technology (Poland); **Günther K. G. Wernicke**, Humboldt-Univ. zu Berlin (Germany)

Monday 15 April

Opening Remarks

Room: Leo 13:25 to 13:30

Session 1

Room: Leo Mon 13:30 to 15:20

Holographic Materials: Characterisation and Modelling

Session Chair: **Antonio Fimia-Gil**, Univ. Miguel Hernández de Elche (Spain)

13:30: **Two-wavelength volume holographic recording in thick phenanthrenequinone-doped poly(methyl methacrylate) photopolymer** (*Invited Paper*), Ken-Yuh Hsu, June H. Lin, Shiu-an Huei Lin, National Chiao Tung Univ. (Taiwan) [8776-1]

14:00: **Holographic recordings with high beam ratios on improved Bayfol(R) HX photopolymer**, Günther Walze, Horst Berneth, Friedrich-Karl Bruder, Thomas Fäcke, Rainer Hagen, Dennis Hönel, Thomas Rölle, Marc-Stephan Weiser, Bayer MaterialScience AG (Germany) [8776-2]

14:20: **Convertible holograms in calcium fluoride crystals with color centers**, Alexander E. Angervaks, Alexander S. Shcheulin, Alexander I. Ryskin, National Research Univ. of Information Technologies, Mechanics and Optics (Russian Federation) [8776-3]

14:40: **Ruthenium and Rhodium doped sillenite crystals: holographic properties and applications at near-infrared spectral range**, Vera M. Gospodinova, Ken-Yuh Hsu, Shiu-an Huei Lin, Ren C. Liu, Yu H. Lin, National Chiao Tung Univ. (Taiwan) [8776-4]

15:00: **Investigations of the behavior for PQ-PMMA material post-exposure**, Yue Qi, H. Li, Univ. College Dublin (Ireland); Elen Tolstik, Friedrich-Schiller-Univ. Jena (Germany); Jinxin Guo, Univ. College Dublin (Ireland); Michael R. Gleeson, National Univ. of Ireland, Maynooth (Ireland); V. Matuevich, Richard M. Kowarschik, Friedrich-Schiller-Univ. Jena (Germany); John T. Sheridan, Univ. College Dublin (Ireland) [8776-5]

Coffee Break Mon 15:20 to 15:50

Session 2

Room: Leo Mon 15:50 to 16:30

Computer Generated Holography and Holographic Displays

Session Chair: **John T. Sheridan**, Univ. College Dublin (Ireland)

15:50: **Numerical analysis of volume holograms with spherical reference wave based on Born approximation**, Shuhei Yoshida, Manabu Yamamoto, Tokyo Univ. of Science (Japan) [8776-6]

16:10: **Optimization of holopixel size and perspectives number in holographic stereogram**, Alexander Y. Zherdev, Sergey B. Odínokov, Dmitriy S. Lushnikov, Vladimir V. Markin, Bauman Moscow State Technical Univ. (Russian Federation) [8776-8]

Tuesday 16 April

Session 3

Room: Leo Tue 9:00 to 10:00

Holographic Security

Session Chair: **Miroslav Hrabovsky**, Palacky Univ. Olomouc (Czech Republic)

9:00: **Security holograms employing perspectival anamorphosis and stereoscopy**, Ivo Aubrecht, Police presidium CR (Czech Republic) [8776-10]

9:20: **Correlation method for quality control of master matrix used to embossing a security holograms**, Vasily Kolyuchkin, Alexander Y. Zherdev, Bauman Moscow State Technical Univ. (Russian Federation); Evgeny Y. Zlokazov, National Research Nuclear Univ. MEPhI (Russian Federation); Dmitriy S. Lushnikov, Sergey B. Odínokov, Bauman Moscow State Technical Univ. (Russian Federation); Andrey V. Smirnov, Krypten (Russian Federation) [8776-11]

9:40: **Digital holographic encryption with multiple-key encoding using micro phase-shifting interferometry**, Chi-Ching Chang, MingDao Univ. (Taiwan); Min-Tzung Shiu, National Defense Univ. (Taiwan) [8776-13]

Coffee Break Tue 10:00 to 10:30

Session 4

Room: Leo Tue 10:30 to 12:10

Digital Holography

Session Chair: **Antonio Fimia-Gil**, Univ. Miguel Hernández de Elche (Spain)

10:30: **Digital holography for recording of incoherent-object hologram as complex spatial coherence function**, Dinesh N. Naik, Giancarlo Pedrini, Wolfgang Osten, Univ. Stuttgart (Germany) [8776-14]

10:50: **Holographic nanointerferometer with digital magnification**, Vladimir Y. Venediktov, Sergey A. Pulkin, Irina M. Pasechnik, St. Petersburg Univ. (Russian Federation) [8776-15]

11:10: **Optical system, comprising digital holographic display and humane eye**, Vladimir Y. Venediktov, St. Petersburg Univ. (Russian Federation) .. [8776-16]

11:30: **Holographic in-line imaging setup for measuring solid content of fluids**, Ville A. Kaikkonen, Anssi J. Mäkynen, Univ. of Oulu (Finland) [8776-17]

11:50: **Web service for digital holographic video processing**, Dmitry A. Ekimov, Petrozavodsk State Univ. (Russian Federation); Anssi J. Mäkynen, Univ. of Oulu (Finland) [8776-18]

Lunch/Exhibition Break Tue 12:10 to 13:20

Session 5

Room: Leo Tue 13:20 to 15:10

Holographic Materials and Data Storage

Session Chair: **John T. Sheridan**, Univ. College Dublin (Ireland)

13:20: **Self-diffraction holographic techniques for investigation of photosensitive materials** (*Invited Paper*), Lucila H. D. Cesato, Luis F. de Avila, Univ. Estadual de Campinas (Brazil); Marcelo Nalin, Univ. Federal de São Carlos (Brazil) [8776-19]

13:50: **Three-dimensional multiplexing method with spherical reference beam**, Hiroyuki Kurata, Shohei Ozawa, Kaito Okubo, Takaaki Matsubara, Shuhei Yoshida, Manabu Yamamoto, Tokyo Univ. of Science (Japan) [8776-20]

14:10: **Volume holographic recording in photopolymerizable nanocomposite materials based on radical-mediated thiol-yne step-growth polymerizations**, Ken Mitsube, Yuki Nishimura, Shingo Takayama, The Univ. of Electro-Communications (Japan); Kohta Nagaya, The Univ. of Electro-Communications (Japan); Yasuo Tomita, The Univ. of Electro-Communications (Japan) ... [8776-21]

14:30: **Analysis of the effects of viscosity, volume, and temperature in photopolymer material for holographic applications**, Jinxin Guo, Univ. College Dublin (Ireland); Michael R. Gleeson, National Univ. of Ireland, Maynooth (Ireland); John T. Sheridan, Univ. College Dublin (Ireland) [8776-22]

14:50: **GPU-based calculations in digital holography**, Roque Fernando Madrigal, Pablo Acebal González, Salvador Blaya, Luis Carretero López, Antonio Fimia-Gil, Francisco A. Serrano, Univ. Miguel Hernández de Elche (Spain) [8776-23]

Coffee Break Tue 15:10 to 15:40

Session 6

Room: Leo Tue 15:40 to 17:20

Holographic Imaging, Fabrication, and Materials

Session Chairs: **Antonio Fimia-Gil**, Univ. Miguel Hernández de Elche (Spain); **Miroslav Hrabovsky**, Palacky Univ. Olomouc (Czech Republic); **John T. Sheridan**, Univ. College Dublin (Ireland)

15:40: **Design and fabrication of two-dimensional hexagonal photonic crystals with a linear waveguide in Erbium-doped GeO₂Bi₂O₃PbOTiO₂ glasses**, Luis F. de Avila, Univ. Estadual de Campinas (Brazil) and Univ. Federal de São Carlos (Brazil); Juliana M. P. Almeida, Univ. de São Paulo (Brazil); Paula S. Valle, Univ. Federal de São Carlos (Brazil); Marcos S. Gonçalves, Univ. Estadual de Campinas (Brazil); Cleber R. Mendonça, Univ. de São Paulo (Brazil); Marcelo Nalin, Univ. Federal de São Carlos (Brazil); Lucila H. D. Cescato, Univ. Estadual de Campinas (Brazil) [8776-24]

16:00: **Investigation of the electromagnetic behavior of AA/PVA based photopolymer material**, Haoyu Li, Yue Qi, Jinxin Guo, Univ. College Dublin (Ireland); Michael Gleeson, Department of Computer Science, NUIIM, Maynooth (Ireland); John T. Sheridan, Univ. College Dublin (Ireland) [8776-25]

16:20: **Preliminary femtosecond irradiation results of chicken lenses analyzed by Digital Holographic Microscopy**, Antonio Fimia-Gil, María Gomariz, Angel Murciano, Pablo Acebal González, Roque Fernando Madrigal, Luis Carretero López, Univ. Miguel Hernández de Elche (Spain); Jorge L. Alió, Alejandra Rodríguez, Vissum Oftalmológica Corp. (Spain); Eduardo Fernández, Univ. Miguel Hernández de Elche (Spain) [8776-26]

16:40: **Vertical light-emitting diodes with SiO₂ two-dimensional light extractor by holographic lithography**, Sang-Mook Kim, Korea Photonics Technology Institute (Korea, Republic of); Hyokun Son, Chonnam National Univ. (Korea, Republic of); Su Chang Ahn, Kwang-Cheol Lee, Nam Hwang, Korea Photonics Technology Institute (Korea, Republic of) [8776-27]

17:00: **Holographic characteristics of modified photo-thermo-refractive glass**, Sergey Ivanov, National Research Univ. of Information Technologies, Mechanics and Optics (Russian Federation) [8776-29]

Wednesday 17 April

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

The optical scheme for recording of miniature light guide holographic indicator, Artem Solomashenko, Sergey B. Odinkov, Vladimir V. Markin, Alexey S. Kuznetsov, Ekaterina Drozdova, Bauman Moscow State Technical Univ. (Russian Federation) [8776-9]

The 'hidden image' effect in security holograms and its personalization by laser demetallization, Andrejs Bulanovs, Edmunds Tamanis, Vadims Kolbjonoks, Daugavpils Univ. (Latvia) [8776-12]

Holographic memory based on computer generated Fourier-holograms, Sergey B. Odinkov, Bauman Moscow State Technical Univ. (Russian Federation); Evgeny Y. Zlokazov, Rostislav S. Starikov, Nikolay N. Evtikhiev, National Research Nuclear Univ. MEPhI (Russian Federation); Vladimir Bobrinev, Nina M. Verenikina, Bauman Moscow State Technical Univ. (Russian Federation); Sergey N. Starikov, National Research Nuclear Univ. MEPhI (Russian Federation); Aleksander Betin, Alexander Y. Zherdev, Dmitriy S. Lushnikov, Vladimir V. Markin, Bauman Moscow State Technical Univ. (Russian Federation) [8776-28]

Damage to VUV, EUV, and X-ray Optics IV

Conference Chairs: **Libor Juha**, Institute of Physics of the ASCR, v.v.i. (Czech Republic); **Sasa Bajt**, Deutsches Elektronen-Synchrotron (Germany); **Richard London**, Lawrence Livermore National Lab. (United States)

Programme Committee: **Fred Bijkerk**, FOM Institute DIFFER (Netherlands); **Fred Bijkerk**, FOM Institute DIFFER (Netherlands); **Henryk Fiedorowicz**, Military Univ. of Technology (Poland); **Jérôme Gaudin**, European XFEL GmbH (Germany); **Jacek Krzywinski**, SLAC National Accelerator Lab. (United States); **Klaus Mann**, Laser-Lab. Göttingen e.V. (Germany); **Tomas Mocek**, Institute of Physics of the ASCR, v.v.i. (Czech Republic); **Ladislav Pina**, Czech Technical Univ. in Prague (Czech Republic); **Jorge J. Rocca**, Colorado State Univ. (United States); **Michael Störmer**, Helmholtz-Zentrum Geesthacht (Germany); **Philippe Zeitoun**, Ecole Nationale Supérieure de Techniques Avancées (France); **Beata Ziaja-Motyka**, Deutsches Elektronen-Synchrotron (Germany)

Monday 15 April

Opening Remarks

Room: Aquarius 13:25 to 13:30

Session 1

Room: Aquarius Mon 13:30 to 14:20

Optics at Facilities

Session Chair: **Libor Juha**, Institute of Physics of the ASCR, v.v.i. (Czech Republic)

13:30: **Development, experimental performance and damage properties of x-ray optics for the LCLS free electron laser** (*Invited Paper*), Regina Soufli, Mónica Fernández-Perea, Lawrence Livermore National Lab. (United States); Jacek Krzywinski, David W. Rich, SLAC National Accelerator Lab. (United States); Sherry L. Baker, Jeffrey C. Robinson, Stefan P. Hau-Riege, Lawrence Livermore National Lab. (United States); Eric M. Gullikson, Valeriy V. Yashchuk, Wayne R. McKinney, Lawrence Berkeley National Lab. (United States); Philip A. Heimann, William F. Schlotter, Michael Rowen, Paul A. Montanez, Sebastien Boutet, SLAC National Accelerator Lab. (United States) [8777-1]

14:00: **Investigation on the state of a DLC-coated plane mirror after two years of use at the FLASH-VUV-FEL at DESY**, Frank Siewert, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany); Frank Scholze, Physikalisch-Technische Bundesanstalt (Germany); Michael Störmer, Helmholtz-Zentrum Geesthacht (Germany); Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8777-2]

Session 2

Room: Aquarius Mon 14:20 to 16:20

Damage by Short Pulses I

Session Chair: **Jaromír Chalupsky**, Institute of Physics of the ASCR, v.v.i. (Czech Republic)

14:20: **VUV-UV multiwavelength excitation process for high-quality ablation of fused silica** (*Invited Paper*), Koji Sugioka, Katsumi Midorikawa, RIKEN (Japan) [8777-3]

14:50: **Characterisation of EUV damage thresholds and imaging performance of Mo/Si multilayer mirrors**, Matthias Müller, Laser-Lab. Göttingen e.V. (Germany); Frank Barkusky, KLA-Tencor Corp. (United States); Torsten Feigl, Fraunhofer-Institut für Angewandte Optik und Feinmechanik IOF (Germany); Klaus Mann, Laser-Lab. Göttingen e.V. (Germany); Torsten Feigl, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany) [8777-4]

Coffee Break Mon 15:10 to

15:10: **Responses of organic and inorganic materials to intense EUV radiation from laser-produced plasmas** (*Invited Paper*), Tetsuya Makimura, Shuichi Torii, Univ. of Tsukuba (Japan); Daisuke Nakamura, Akihiko Takahashi, Kyushu Univ. (Japan); Hiroyuki Niino, National Institute of Advanced Industrial Science and Technology (Japan); Kouichi Murakami, Univ. of Tsukuba (Japan) [8777-5]

15:40: **Application of EUV optics to surface modification of materials**, Oleksandr Frolov, Karel Kolacek, Jiri Schmidt, Jaroslav Straus, Vaclav Prukner, Institute of Plasma Physics of the ASCR, v.v.i. (Czech Republic); Andrei Choukourov, Charles Univ. in Prague (Czech Republic) [8777-6]

16:00: **EUV induced ablation and surface modification of poly(vinylidene fluoride) irradiated in vacuum or gaseous environment**, Andrzej S Bartnik, Military University of Technology (Poland); Wojciech Lisowski, Janusz Sobczak, Institute of Physical Chemistry Polish Academy of Sciences (Poland); Przemyslaw Wachulak, Boguslaw Budner, Barbara Korczyk, Henryk Fiedorowicz, Jerzy Kostecki, Military University of Technology (Poland) [8777-7]

Tuesday 16 April

Session 3

Room: Aquarius Tue 8:30 to 11:20

Mechanisms and Theory

Session Chair: **Ryszard Sobierajski**, Institute of Physics (Poland)

8:30: **Non-thermal phase transitions in semiconductors under femtosecond XUV irradiation** (*Invited Paper*), Nikita A. Medvedev, Ctr. for Free-Electron Laser Science (Germany); Harald O. Jeschke, Johann Wolfgang Goethe-Univ. Frankfurt am Main (Germany); Beata Ziaja, Ctr. for Free-Electron Laser Science (Germany) [8777-8]

9:00: **Hydrodynamics and detailed atomic physics treatment of XFEL interaction with matter**, Olivier Peyrussu, Univ. Bordeaux 1 (France) [8777-9]

9:20: **Numerical study of single shot damage thresholds of multilayer optics for high-intensity short-wavelength radiation sources**, Rolf A. Loch, FOM Institute DIFFER (Netherlands); Ryszard Sobierajski, Institute of Physics (Poland); Eric Louis, FOM Institute DIFFER (Netherlands) and Univ. Twente (Netherlands); Jeroen Bosgra, FOM Institute DIFFER (Netherlands); Fred Bijkerk, FOM Institute DIFFER (Netherlands) and Univ. Twente (Netherlands) [8777-10]

9:40: **Global sensitivity analysis of the XUV-ABLATOR code**, Vaclav Nevrlý, Michal Vasínek, Jaroslav Janku, Jakub Dlabka, VSB-TU Ostrava (Czech Republic); Libor Juha, Ludek Vysin, Tomás Burian, Jan Lancok, Jan Skrinsky, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Zdenek Zelinger, Institute of Physical Chemistry (Czech Republic); Peter Pira, Jan Wild, Charles Univ. in Prague (Czech Republic) [8777-11]

Coffee Break Tue 10:00 to 10:30

10:30: **Mechanisms of structural changes induced by electronic excitations in solids** (*Invited Paper*), Yuzo Shinozuka, Wakayama Univ. (Japan) [8777-12]

11:00: **Theoretical investigation of scattering properties of crystal exposed to the XFEL femtosecond pulse**, Aleksandr V. Leonov, Belarusian State Univ. (Belarus); Dmitriy Ksenzov, Univ. Siegen (Germany); Andrei Benediktovitch, Ilya D. Feranchuk, Belarusian State Univ. (Belarus); Ullrich Pietsch, Univ. Siegen (Germany) [8777-13]

Session 4

Room: Aquarius Tue 11:20 to 12:20

Damage by Ultrashort Pulses II

Session Chair: **Regina Soufli**, Lawrence Livermore National Lab. (United States)

11:20: **Multiple free electron laser pulse illumination of a carbon coated silicon substrate**, Björn Siemer, Tim Hoger, Marco Rutkowski, Westfälische Wilhelms-Univ. Münster (Germany); Stefan Düsterer, Deutsches Elektronen-Synchrotron (Germany); Helmut Zacharias, Westfälische Wilhelms-Univ. Münster (Germany) [8777-14]

11:40: **Multiple pulse damage in Mo/Si multilayer optics irradiated by intense short-wavelength FELs**, Ryszard Sobierajski, Institute of Physics (Poland); Rolf A. Loch, FOM Institute DIFFER (Netherlands); Eric Louis, FOM Institute DIFFER (Netherlands) and Univ. Twente (Netherlands); Dorota Klinger, Piotr Dluzewski, Institute of Physics (Poland); Marcin Klepka, FOM Institute DIFFER (Netherlands); Fred Bijkerk, FOM Institute DIFFER (Netherlands) and Univ. Twente (Netherlands); Tomás Burian, Jaromír Chalupsky, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Shafagh Dastjani Farahani, European XFEL GmbH (Germany); Vera Hájková, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Marion Harmand, Deutsches Elektronen-Synchrotron (Germany); Jacek Krzywinski, SLAC National Accelerator Lab. (United States); Libor Juha, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Stefan P. Moeller, SLAC National Accelerator Lab. (United States); Jérôme Gaudin, European XFEL GmbH (Germany); Andrzej Wawro, Institute of Physics (Poland) [8777-15]

12:00: **Results from single shot grazing incidence hard x-ray damage measurements conducted at the SACLA FEL**, Andrew Aquila, Cigdem Ozkan, European XFEL GmbH (Germany); Ryszard Sobierajski, Institute of Physics (Poland); Vera Hájková, Tomáš Burian, Jaromír Chalupsky, Libor Juha, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Michael Störmer, Helmholtz-Zentrum Geesthacht (Germany); Haruhiko Ohashi, Japan Synchrotron Radiation Research Institute (Japan) and RIKEN (Japan); Takahisa Koyama, Kensuke Tono, Japan Synchrotron Radiation Research Institute (Japan); Yuichi Inubushi, Makina Yabashi, RIKEN (Japan); Harald Sinn, Thomas Tschentscher, Adrian P. Mancuso, European XFEL GmbH (Germany); Jérôme Gaudin, Univ. Bordeaux 1 (France) [8777-16]
Lunch/Exhibition Break Tue 12:20 to 13:40

Session 5

Room: Aquarius Tue 13:40 to 14:20

Damage by Ultrashort Pulses III

Session Chair: **Regina Soufli**,
Lawrence Livermore National Lab. (United States)

13:40: **Thermal effects on Co/Mo₂C multilayer mirrors studied by soft x-ray standing wave enhanced photoemission spectroscopy**, Angelo Giglia, Lab. Nazionale TASC (Italy); Subhrangsu Mukherjee, North Carolina State Univ. (United States); Nicola Mahne, Sincrotrone Trieste S.C.p.A. (Italy); Stefano Nannarone, Univ. degli Studi di Modena e Reggio Emilia (Italy); Philippe Jonnard, Karine Le Guen, Jean-Michel André, Yanyan Yuan, Univ. Pierre et Marie Curie (France); Zhanshan Wang, Jingtao Zhu, Tongji Univ. (China) [8777-17]

14:00: **Fragmentation of clusters and recombination induced by intense and ultrashort x-ray laser pulses**, Nicusor Timneanu, Bianca S. Iwan, Jakob Andreasson, Magnus Bergh, Marvin Seibert, Uppsala Univ. (Sweden); Christoph Bostedt, Sebastian Schorb, Heiko Thomas, Daniela Rupp, Tais Gorkhover, Marcus Adolph, Thomas Möller, Technische Univ. Berlin (Germany); Ahmed Helal, Kay Hoffmann, Nirmala Kandadai, John W. Keto, Todd Ditmire, The Univ. of Texas at Austin (United States); Janos Hajdu, Uppsala Univ. (Sweden) [8777-18]

Session 6

Room: Aquarius Tue 14:20 to 15:20

Damage to Detectors

Session Chair: **Rolf Antonie Loch**, FOM Institute DIFFER (Netherlands)

14:20: **Study of high-dose x-ray radiation damage of silicon sensors** (*Invited Paper*), Robert Klanner, Eckhart Fretwurst, Univ. Hamburg (Germany); Ioana Pintilie, National Institute for Materials Physics (Romania); Joern Schwandt, Jianguo Zhang, Univ. Hamburg (Germany) [8777-19]

15:00: **X-ray laser-induced damage to inorganic scintillator materials**, Tomáš Burian, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jérôme Gaudin, Cigdem Ozkan, European XFEL GmbH (Germany); Jaromír Chalupsky, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Sasa Bajt, Deutsches Elektronen-Synchrotron (Germany); Ludek Vyšín, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Nicola Coppola, Shafagh Dastjani Farahani, European XFEL GmbH (Germany); Henry N. Chapman, Deutsches Elektronen-Synchrotron (Germany); Vera Hájková, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Marion Harmand, Institut National de la Recherche Scientifique (Canada); Libor Juha, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Marek Jurek, Institute of Physics (Poland); Rolf Antonie Loch, FOM Institute DIFFER (Netherlands); Jacek Krzywinski, SLAC National Accelerator Lab. (United States); Stefan Möller, Univ. Osnabrück (United States); Mitsuru Nagasono, RIKEN (Japan); Harald Sinn, European XFEL GmbH (Germany); Ryszard Sobierajski, Institute of Physics (Poland); Joachim Schulz, European XFEL GmbH (Germany); Sven Toleikis, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany); Thomas Tschentscher, European XFEL GmbH (Germany) [8777-20]

Coffee Break Tue 15:20 to 15:50

Session 7

Room: Aquarius Tue 15:50 to 18:00

Experimental Techniques

Session Chair: **Frank Siewert**, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany)

15:50: **Experimental study of dynamics of solids exposed to intense and ultrashort radiation** (*Invited Paper*), Claude Fourment, François Deneuille, Univ. Bordeaux 1 (France) [8777-21]

16:20: **A new method of determination of ablation threshold contour in the spot of focused EUV laser beam of nanosecond duration**, Karel Kolacek, Jiri Schmidt, Jaroslav Straus, Oleksandr Frolov, Vaclav Prukner, Radek Melich, Institute of Plasma Physics of the ASCR, v.v.i. (Czech Republic) [8777-22]

16:40: **On the properties of (inverse) fluence scan**, Jaromír Chalupsky, Tomáš Burian, Libor Juha, Vera Hájková, Institute of Physics, AS CR (Czech Republic); Tomáš Polcar, Faculty of Electrical Engineering, Czech Technical University (Czech Republic); Jerome Gaudin, Univ. Bordeaux, CEA, CNRS, CELIA (France); Ryszard Sobierajski, Institute of Physics, Polish Academy of Sciences (Poland); Mitsuru Nagasono, Makina Yabashi, RIKEN/SPring-8 (Japan) [8777-23]

17:00: **RF plasma cleaning of mirror surfaces: characterization, optimization, and surface physics aspects of plasma processing** (*Invited Paper*), Eric J. Pellegrin, Igors Sics, Carlos Perez Sempere, Juan Reyes Herrera, CELLS-ALBA (Spain); Vincent L. Carlino, Ibss Group, Inc. (United States) [8777-24]

17:30: **Refurbishment of damaged multilayer collector mirrors for EUV lithography** (*Invited Paper*), Torsten Feigl, Marco Perske, Hagen Pauer, Tobias Fiedler, Sergiy Yulin, Norbert Kaiser, Fraunhofer-Institut für Angewandte Optik und Feinmechanik (Germany); Norbert R. Bowering, Cymer, Inc. (Netherlands); Kay Hoffmann, Cymer, Inc. (United States) [8777-25]

Wednesday 17 April

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Procedure of study of hardness of silicon photodiodes to radiation of the EUV and x-ray spectral ranges, Anton D. Nikolenko, Denis Ivlyushkin, Valery F. Pindyurin, Nikita Shadrin, Artem Soldatov, Budker Institute of Nuclear Physics (Russian Federation); Vladimir Zabrodsky, Ioffe Physico-Technical Institute (Russian Federation) [8777-26]

Study of radiation hardness of silicon photodiodes after exposure to EUV and x-ray radiation, Vladimir Zabrodsky, Pavel Aruev, Vladimir Filimonov, Nikolai A. Sobolev, Evgeniy Sherstnev, Ioffe Physico-Technical Institute (Russian Federation); Anton D. Nikolenko, Denis Ivlyushkin, Valery F. Pindyurin, Nikita Shadrin, Artem Soldatov, Mikhail Mashkovtsev, Budker Institute of Nuclear Physics (Russian Federation) [8777-27]

Electron kinetics in liquid water excited by a femtosecond VUV laser pulse, Klaus Huthmacher, Technische Univ. Kaiserslautern (Germany); Nikita A. Medvedev, Ctr. for Free-Electron Laser Science (Germany); Bärbel Rethfeld, Technische Univ. Kaiserslautern (Germany) [8777-28]

Characterizing the focus of a multilayer coated off-axis parabola for FLASH beam at = 4.3 nm, Adam F. Leontowich, McMaster Univ. (Canada); Andrew Aquila, European XFEL GmbH (Germany); Francesco Stellato, Richard Bean, Holger Fleckenstein, Deutsches Elektronen-Synchrotron (Germany); Mauro Prasciolu, Istituto Nazionale per la Fisica della Materia (Italy); Mengning Liang, Daniel P. De Ponte, Deutsches Elektronen-Synchrotron (Germany); Anton Barty, Lawrence Livermore National Lab. (United States); Feng-lin Wang, Deutsches Elektronen-Synchrotron (Germany); Jakob Andreasson, Janos Hajdu, Uppsala Univ. (Sweden); Henry N. Chapman, Sa?a Bajt, Deutsches Elektronen-Synchrotron (Germany) [8777-29]

King's College LPP X-ray source design, Alan G. Michette, Radhwan Alnaimi, King's College London (United Kingdom) [8777-30]

Laser ablation of amorphous SiO₂ by ultrashort pulses of XUV free electron laser, D. Klinger, R. Sobierajski, E. Lusakowska, J.B. Pelka, D. Zymierska, Institute of Physics, Polish Academy of Sciences (Poland); T. Burian, J. Chalupský, Institute of Physics, Czech Academy of Sciences and Czech Technical Univ. in Prague (Czech Republic); V. Hájková, Institute of Physics, Czech Academy of Sciences (Czech Republic); A.J. Gleeson, CCRLC/Daresbury Lab. (United Kingdom); S. Hau-Riege, Lawrence Livermore National Lab. (United States); L. Juha, Institute of Physics, Czech Academy of Sciences (Czech Republic); A.R. Khorsand, Dutch Institute for Fundamental Energy Research (Netherlands); J. Krzywinski, SLAC National Accelerator Lab. (United States); R. London, Lawrence Livermore National Lab. (United States); S. Moeller, SLAC National Accelerator Lab. (United States); M. Nagasono, RIKEN/Spring-8 (Japan); H. Sinn, European XFEL GmbH (Germany); K. Sokolowski-Tinten, Univ. of Duisburg-Essen (Germany); N. Stojanovic, K. Tiedtke, S. Toleikis, Deutsches Elektronen-Synchrotron DESY (Germany); T. Tschentscher, European XFEL GmbH (Germany); L. Vyšín, Institute of Physics, Czech Academy of Sciences and Czech Technical Univ. in Prague (Czech Republic); H. Wabnitz, Deutsches Elektronen-Synchrotron DESY (Germany) [8777-58]

EUV and X-ray Optics: Synergy between Laboratory and Space III

Conference Chairs: **René Hudec**, Astronomical Institute of the ASCR, v.v.i. and Czech Technical Univ. in Prague (Czech Republic); **Ladislav Pina**, Czech Technical Univ. in Prague (Czech Republic)

Programme Committee: **Webster Cash**, Univ. of Colorado at Boulder (United States); **George W. Fraser**, Univ. of Leicester (United Kingdom); **René Hudec**, Astronomical Institute of the ASCR, v.v.i. and Czech Technical Univ. in Prague (Czech Republic); **Ali Khounsary**, Argonne National Lab. (United States); **Alan G. Michette**, King's College London (United Kingdom); **Giovanni Pareschi**, INAF - Osservatorio Astronomico di Brera (Italy); **Ladislav Pina**, Czech Technical Univ. in Prague (Czech Republic); **Yuriy Ya. Platonov**, Rigaku Innovative Technologies, Inc. (United States); **Paul B. Reid**, Harvard-Smithsonian Ctr. for Astrophysics (United States); **Bedrich Rus**, Institute of Physics of the ASCR, v.v.i. (Czech Republic); **Anatoly A. Snigirev**, European Synchrotron Radiation Facility (France); **Peter Z. Takacs**, Brookhaven National Lab. (United States); **Melville P. Ulmer**, Northwestern Univ. (United States); **David L. Windt**, Reflective X-Ray Optics LLC (United States); **William W. Zhang**, NASA Goddard Space Flight Ctr. (United States)

Wednesday 17 April

Opening Remarks

Room: Quadrant **13:00 to 13:10**

Session 10

Room: Quadrant **Wed 13:10 to 15:20**

Astronomical X-ray Optics

13:10: **X-ray optic developments at NASA's MSFC** (*Invited Paper*), Carolyn Atkins, Univ. of Alabama in Huntsville (United States); Brian D. Ramsey, Kiranmayee Kilaru, Mikhail V. Gubarev, Stephen L. O'Dell, Ronald F. Elsner, Douglas A. Swartz, Jessica A. Gaskin, Martin C. Weisskopf, NASA Marshall Space Flight Ctr. (United States) [8777-31]

13:40: **Hybrid X-ray optical system for space astrophysics**, Ladislav Pina, René Hudec, Vladimir Tichy, Czech Technical Univ. in Prague (Czech Republic); Adolf J. Inneman, Daniela Cerna, Jiri Marsik, Veronika Marsikova, Rigaku Innovative Technologies Europe (Czech Republic); Webster Cash, Ann F. Shipley, Benjamin R. Zeiger, Thomas D. Rogers, Univ. of Colorado at Boulder (United States) [8777-32]

14:00: **Ray-tracing study of the eROSITA telescope**, Emanuele Perinati, Eberhard Karls Univ. Tübingen (Germany); Michael J. Freyberg, Max-Planck-Institut für Extraterrestrische Physik (Germany) [8777-33]

14:20: **Slumping of Si wafers at high temperature**, Martin Mika, O. Jankovsky, P. Simek, Institute of Chemical Technology (Czech Republic); Radka Havlikova, Czech Technical Univ. in Prague (Czech Republic); Z. Sofer, Institute of Chemical Technology (Czech Republic); René Hudec, Ladislav Pina, Czech Technical Univ. in Prague (Czech Republic); Adolf J. Inneman, Rigaku Innovative Technologies Europe (Czech Republic); Libor Sveda, Czech Technical Univ. in Prague (Czech Republic); Veronika Semencova, REFLEX s.r.o. (Czech Republic) [8777-34]

14:40: **Fast and simple algorithm for computer simulation of multi-foil optics**, Vladimir Tichy, Czech Technical Univ. in Prague (Czech Republic) [8777-35]

15:00: **NANOX - Proposed Nano-Satellite X-Ray Space Mission**, Vladimir Tichy, Czech Technical Univ. in Prague (Czech Republic); Vojtech Simon, Astronomical Institute of the Academy of Sciences (Czech Republic); Marco Barbera, Università degli Studi di Palermo (Italy); René Hudec, Czech Technical Univ. in Prague (Czech Republic); Adolf Inneman, Rigaku Innovative Technologies Europe, s.r.o. (Czech Republic); Ladislav Pina, Czech Technical Univ. in Prague (Czech Republic) [8777-36]

Coffee Break Wed 15:20 to 15:50

Session 11

Room: Quadrant **Wed 15:50 to 17:30**

Diffraction and Refractive X-ray Optics

15:50: **Concepts for rapid tuning and switching of x-ray energies**, Werner H. Jark, Sincrotrone Trieste S.C.p.A. (Italy) [8777-37]

16:10: **The impact of novel 3-dimension diffraction optics development**, Alexander Firsov, Maria Brzhezinskaya, Heike Loechel, Frank Siewert, Alexei Erko, Helmholtz-Zentrum Berlin für Materialien und Energie (Germany) [8777-38]

16:30: **X-ray nanoprobe based on a refractive optic and x-ray coherent diffraction as a complex tool for ZrOx/SiO2 multilayer studying**, Petr Ershov, European Synchrotron Radiation Facility (France) and Immanuel Kant Baltic Federal University (Russian Federation); Alexander Goikhman, Natali Klimova, Immanuel Kant Baltic Federal University (Russian Federation); Vyacheslav Yunkin, IMT RAS (Russian Federation); Mikhail Lyubomirskiy, Irina Snigireva, Anatoly Snigirev, European Synchrotron Radiation Facility (France) [8777-39]

16:50: **X-Ray multilens interferometer based on planar refractive optics**, Mikhail Lyubomirskiy, European Synchrotron Radiation Facility (France); Anatoly Snigirev, ESRF (France); Iraida Snigireva, European Synchrotron Radiation Facility (France); Viktor Kohn, Kurchatov Institute (Russian Federation); Vyacheslav Yunkin, Sergey Kuznetsov, IMT RAS (Russian Federation) [8777-40]

17:10: **X-ray Refractive optic as a Fourier transformer for high resolution diffraction**, Petr Ershov, Immanuel Kant Baltic Federal University (Russian Federation) and ESRF (France); Serguei Kuznetsov, IMT RAS (Russian Federation); Irina Snigireva, ESRF (France); Vyacheslav Yunkin, IMT RAS (Russian Federation); Alexander Goikhman, Immanuel Kant Baltic Federal University (Russian Federation); Anatoly Snigirev, ESRF (France) [8777-41]

Poster Session

Meridian Hall **Wed 17:40 to 19:15**

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Analytic investigation of Fourier-transform holographic magnetic imaging method based on the magneto-optical effect, Dong-Hyun Kim, Chungbuk National University (Korea, Republic of); Tae Kyu Kim, Pusan National University (Korea, Republic of); Jaehun Park, Pohang Accelerator Laboratory (Korea, Republic of); Djati Handoko, Chungbuk National University (Korea, Republic of) ... [8777-57]

Thursday 18 April

Session 12

Room: Quadrant **Thu 9:00 to 10:20**

X-ray Microscopes and Active X-ray Optics

9:00: **Adaptive X-ray optics development at AOA-Xinetics**, Kevin M. Ezzo, Northrop Grumman Xinetics (United States); Charles F. Lillie, Lillie Consulting, LLC. (United States); David D. Pearson, Jeffrey L. Cavaco, Audrey D. Brooks, Northrop Grumman Xinetics (United States) [8777-42]

9:20: **Active X-ray optics**, René Hudec, Astronomical Institute of the ASCR, v.v.i. (Czech Republic) and Czech Technical University in Prague (Czech Republic); Adolf J. Inneman, Rigaku Innovative Technologies Europe (Czech Republic); Daniela Cerna, Rigaku Innovative Technologies (Czech Republic); Zdenek Hurak, Marek Hudec, Vladimir Tichy, Ladislav Pina, Czech Technical Univ. in Prague (Czech Republic) [8777-43]

9:40: **Water-window microscopy using compact, laser-plasma source based on Ar/He double stream gas-puff target**, Przemyslaw W Wachulak, Andrzej Bartnik, Marcin Skorupka, Jerzy Kostecki, Roman Jarocki, Mirosław Szczurek, Lukasz Wegrzynski, Tomasz Fok, Henryk Fiedorowicz, Military Univ of Technology (Poland) [8777-44]

10:00: **Planned soft X-ray transmission microscope at the Czech Technical University in Prague**, Vladimir Tichy, Petr Bruza, Radek Machán, Dalibor Pánek, Alena Semerádtová, Mirosłava Vrbová, Czech Technical Univ. in Prague (Czech Republic) [8777-45]

Coffee Break Thu 10:20 to 10:50

Session 13

Room: Quadrant **Thu 10:50 to 12:30**

Multilayer X-ray Optics

10:50: **Spectral filtering optimization of a measuring channel of a X-ray broadband spectrometer**, Benoit Emprin, Philippe Troussel, Bruno Villette, Commissariat à l'Énergie Atomique (France); Françoise Bridou, Franck Delmotte, Lab. Charles Fabry (France) [8777-46]

11:10: **Single and multi-channel Al-based multilayer systems for space applications in EUV range**, Evgueni Meltchakov, Sébastien de Rossi, Lab. Charles Fabry (France); Raymond Mercier, Institut d'Optique Graduate School (France); Françoise Varnière, Lab. Charles Fabry (France); Arnaud Jérôme, Institut d'Optique Graduate School (France); Frédéric Auchère, Xueyan Zhang, Institut d'Astrophysique Spatiale (France); Marc Roulliay, L'Institut des Sciences Moleculaires d'Orsay (France); Franck Delmotte, Institut d'Optique Graduate School (France) [8777-47]

11:30: **Multilayer reflective polarizers for the far ultraviolet**, Juan I. Larruquert, José A. Aznárez Candao, Luis Rodríguez de Marcos, José A. Méndez, Consejo Superior de Investigaciones Científicas (Spain); A. Marco Malvezzi, Univ. degli Studi di Pavia (Italy); Angelo Giglia, Lab. Nazionale TASC (Italy); Paolo Miotti, Fabio Frassetto, Univ. degli Studi di Padova (Italy); Giuseppe Massone, INAF - Osservatorio Astronomico di Torino (Italy); Stefano Nannarone, Univ. degli Studi di Modena e Reggio Emilia (Italy); Giuseppe Crescenzo, Gerardo Capobianco, Silvano Fineschi, INAF - Osservatorio Astronomico di Torino (Italy). [8777-48]

11:50: **Narrowband coatings for the 100-105 nm range**, Luis Rodríguez de Marcos, José A. Méndez, Manuela Vidal-Dasilva, José A. Aznárez Candao, Juan I. Larruquert, Consejo Superior de Investigaciones Científicas (Spain) [8777-49]

12:10: **Optical performance, structure and thermal stability of Al/Zr multilayers working at above 17nm**, Zhanshan Wang, Qi Zhong, Zhong Zhang, Jingtao Zhu, Tongji Univ. (China); Yuhong Bai, Changchun Institute of Optics, Fine Mechanics and Physics (China); Philippe Jonnard, Karine Le Guen, Jean-Michel André, Univ. Pierre et Marie Curie (France) [8777-50]

Lunch Break Thu 12:30 to 13:50

Session 14

Room: Quadrant Thu 13:50 to 15:00

Coherent Radiation/Lasers

13:50: **EUV optics in photoionization experiments (Invited Paper)**, Andrzej S. Bartnik, Przemyslaw W. Wachulak, Henryk Fiedorowicz, Tomasz Fok, Roman Jarocki, Jerzy Kostecki, Anna Szczurek, Mirosław Szczurek, Military Univ. of Technology (Poland) [8777-53]

14:20: **Single-shot pulse duration measurements at free-electron lasers based on transient plasma reflectivity change**, Robert Riedel, Univ. Hamburg (Germany) and Helmholtz-Institut Jena (Germany); A. A. Shemmary, Deutsches Elektronen-Synchrotron (Germany); M. Gensch, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); T. Golz, Marion Harmand, N. Medvedev, M. J. Prandolini, Deutsches Elektronen-Synchrotron (Germany); Klaus Sokolowski-Tinten, Univ. Duisburg-Essen (Germany); Sven Toleikis, U. Wegner, Beata Ziaja-Motyka, Nicola Stojanovic, Franz Tavella, Deutsches Elektronen-Synchrotron (Germany) [8777-51]

14:40: **On the problem of measurements of polarization of the FEL radiation**, Sergei V. Bobashev, Ioffe Physico-Technical Institute (Russian Federation); A. A. Markova, St. Petersburg State Polytechnical Univ. (Russian Federation) . [8777-54]

Session 15

Room: Quadrant Thu 15:00 to 15:40

X-ray Holography and Integrated Devices and Systems

15:00: **A novel monochromator for ultrashort soft X-ray pulses**, Maria Brzhezinskaya, Alexander Firsov, Karsten Holldack, Torsten Kachel, Rolf Mitzner, Niko Pontius, Christian Stamm, Jan-Simon Schmidt, Alexander Foehlich, Alexei Erko, Helmholtz-Zentrum Berlin (Germany) [8777-55]

15:20: **4H-SiC and novel SI GaAs-based M-S-M radiation hard photodetectors applicable in UV, EUV and soft X-ray detection: design, technology and performance testing**, Frantisek Dubecky, Institute of Electrical Engineering, Slovak Academy of Sciences (Slovakia); Jaroslav Kovár, Institute of Electronics and Photonics, Slovak University of Technology (Slovakia); Bohumír Zarko, Institute of Electrical Engineering, Slovak Academy of Sciences (Slovakia); Jiri Osvald, Pavel Hubík, Dobroslav Kindl, Institute of Physics, v.v.i., Academy of Sciences of the Czech Republic (Czech Republic); Gabriel Vanko, Pavol Boháček, Institute of Electrical Engineering, Slovak Academy of Sciences (Slovakia); Andrea Sagátová-Perdochová, Vladimír Necas, Institute of Nuclear and Physical Engineering, Slovak University of Technology (Slovakia); Mária Sekáčová, Institute of Electrical Engineering, Slovak Academy of Sciences (Slovakia). [8777-56]

Advances in X-ray Free-Electron Lasers II: Instrumentation

Conference Chairs: **Thomas Tschentscher**, European XFEL GmbH (Germany); **Kai Tiedtke**, Deutsches Elektronen-Synchrotron (Germany)

Programme Committee: **Roberto Cimino**, Istituto Nazionale di Fisica Nucleare (Italy); **Christopher Gerth**, Deutsches Elektronen-Synchrotron (Germany); **Klaus Mann**, Laser-Lab. Göttingen e.V. (Germany); **Aymeric Robert**, SLAC National Accelerator Lab. (United States); **Volker Schlott**, Paul Scherrer Institut (Switzerland); **Makina Yabashi**, RIKEN (Japan); **Marco Zangrando**, Sincrotrone Trieste S.C.p.A. (Italy); **Philippe Zeitoun**, Ecole Nationale Supérieure de Techniques Avancées (France)

Wednesday 17 April

Opening Remarks

Room: Zenit 8:25 to 8:30

Session 1

Room: Zenit Wed 8:30 to 10:10

Status of Operational and Planned FEL Facilities and Source Developments

Session Chair: **Thomas Tschentscher**, European XFEL GmbH (Germany)

8:30: **The FERMI@ELETTA free-electron laser: a coherent laser source in the VUV/soft X-ray spectral range** (*Invited Paper*), Giovanni De Ninno, Univ. of Nova Gorica (Italy) [8778-1]

9:00: **Harmonic lasing in X-ray FELs** (*Invited Paper*), Evgeny Schneidmiller, Mikhail V. Yurkov, Deutsches Elektronen-Synchrotron (Germany) [8778-2]

9:30: **Coherent THz Radiation from linacs and 4th Generation X-ray Light sources**, Nikola Stojanovic, DESY (Germany) [8778-3]

9:50: **Two colors SASE FEL experiment at SPARC-LAB**, G. Gatti, Istituto Nazionale di Fisica Nucleare (Italy) [8778-4]

Coffee Break Wed 10:10 to 10:40

Session 2

Room: Zenit Wed 10:40 to 12:20

Scientific Applications and Their Instrumentation Requirements

Session Chair: **Aymeric Robert**, SLAC National Accelerator Lab. (United States)

10:40: **Magnetic systems studied with linear and circular polarized FEL radiation** (*Invited Paper*), Gerhard Gruebel, Deutsches Elektronen-Synchrotron (Germany) [8778-5]

11:10: **Four wave mixing using coherent FEL radiation** (*Invited Paper*), Filippo Bencivenga, Sincrotrone Trieste S.C.p.A. (Italy); Lorenzo Raimondi, Cristian Svetina, Sincrotrone Trieste S.C.p.A. (Italy); Claudio Masciovecchio, Elettra (Italy) [8778-6]

11:40: **The impact of pulse duration on multiphoton ionization in the soft X-ray regime**, Mathias Richter, Physikalisch-Technische Bundesanstalt (Germany); Andrey A. Sorokin, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8778-7]

12:00: **Coherence measurement in the water window and time-resolved single-shot diffraction of lipid membrane with fs FEL-pulses**, Dong-Du Mai, Tim Salditt, University Göttingen (Germany) [8778-8]

Lunch/Exhibition Break Wed 12:20 to 13:40

Session 3

Room: Zenit Wed 13:40 to 17:20

Optics, Beam Transport Performance, Spatial and Coherence Properties

Session Chair: **Klaus Mann**, Laser-Lab. Göttingen e.V. (Germany)

13:40: **Adaptive/bimorph mirror optics for FELs** (*Invited Paper*), Riccardo Signorato, Bruker ASC GmbH (Germany) [8778-9]

14:10: **Recent development of thin diamond crystals for X-ray FEL beam-sharing**, Yiping Feng, SLAC National Accelerator Lab. (United States) [8778-10]

14:30: **Development of active gratings for the spectral selection of ultrafast pulses**, Stefano Bonora, Fabio Frassetto, Giovanna Brusatin, Gioia Della Giustina, Univ. degli Studi di Padova (Italy); Salvatore Stagira, Politecnico di Milano (Italy); Caterina Vozzi, Carlo Zanchetta, Luca Poletto, Univ. degli Studi di Padova (Italy) [8778-11]

14:50: **Fabrication and characterization of B4C coatings for advanced research light sources**, Michael Störmer, Helmholtz-Zentrum Geesthacht (Germany); Igor V. Kozhevnikov, A.V. Shubnikov Institute of Crystallography (Russian Federation); Frank Siewert, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany); Harald Sinn, Liubov Samylova, European XFEL GmbH (Germany); Jérôme Gaudin, European XFEL GmbH (France) [8778-12]

Coffee Break Wed 15:10 to 15:40

15:40: **Numerical study of Li2O-based multilayer optics for water-window wavelength radiation**, Rolf A. Loch, FOM Institute DIFFER (Netherlands); Ryszard Sobierajski, Institute of Physics (Poland); Jeroen Bosgra, FOM Institute DIFFER (Netherlands); Eric Louis, Fred Bijkerk, FOM Institute DIFFER (Netherlands) and Univ. Twente (Netherlands) [8778-13]

16:00: **Nanofocusing and single shot wavefront diagnosis of SACLA**, Kazuto Yamauchi, Osaka Univ. (Japan); Makina Yabashi, RIKEN (Japan); Hidekazu Mimura, The Univ. of Tokyo (Japan); Hirokatsu Yumoto, Takahisa Koyama, Kensuke Tono, Tadashi Togashi, Japan Synchrotron Radiation Research Institute (Japan); Yuichi Inubushi, Takashiro Sato, Tetsuji Katayama, RIKEN (Japan); Satoshi Matsuyama, Jangwoo Kim, Ryosuke Fukui, Y. Sano, Osaka Univ. (Japan); Wataru Yashiro, The Univ. of Tokyo (Japan); Takashi Ohmori, RIKEN (Japan); Shunji Goto, Haruhiko Ohashi, Japan Synchrotron Radiation Research Institute (Japan); Atsushi Momose, Tohoku Univ. (Japan); Tetsuya Ishikawa, RIKEN (Japan) [8778-14]

16:20: **Full characterization of a focused wave field with sub 100 nm resolution**, Robert Hoppe, Technische Univ. Dresden (Germany) [8778-15]

16:40: **Measurement of wavefront and Wigner distribution function for optics alignment and full beam characterization of FELs**, Tobias Mey, Bernd Schäfer, Laser-Lab. Göttingen e.V. (Germany); Bernhard Flöter, Volkswagen AG Wolfsburg (Germany); Klaus Mann, Laser-Lab. Göttingen e.V. (Germany); Barbara Keitel, Marion Kuhlmann, Elke C. Plönjes-Palm, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8778-16]

17:00: **Two-dimensional coherence measurements of FEL radiation: the heterodyne speckle approach**, Matteo D Alaimo, Michele Manfreda, Marco A C Potenza, Marzio Giglio, Univ. degli Studi di Milano (Italy) [8778-17]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Beam characterization of FLASH from beam profile measurement by intensity transport equation and reconstruction of the Wigner distribution function, Bernd Schäfer, Tobias Mey, Klaus Mann, Laser-Lab. Göttingen e.V. (Germany); Barbara Keitel, Elke C. Plönjes-Palm, Marion Kuhlmann, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8778-35]

Tunable IR/THz source for pump probe experiments at the European XFEL, Mikhail V. Yurkov, Evgeny Schneidmiller, Mikhail Krasilnikov, Frank Stephan, Deutsches Elektronen-Synchrotron (Germany) [8778-36]

Status of the FLASH II extension to FLASH, E. Plönjes, Bart Fraatz, Deutsches Elektronen-Synchrotron (Germany) [8778-37]

Micro-focusing of soft X-ray pulses by grazing-incidence toroidal mirrors, Luca Poletto, Istituto di Fotonica e Nanotecnologie (Italy); Fabio Frassetto, Institute of Photonics and Nanotechnologies (Italy); Sunilkumar Anumula, Politecnico di Milano - Department of Physics (Italy); Francesca Calegari, Istituto di Fotonica e Nanotecnologie (Italy); Andrea Trabattori, Mauro Nisoli, Politecnico di Milano (Italy) [8778-38]

Hartmann wavefront measurements at FLASH, Barbara Keitel, Svea Kreis, Marion Kuhlmann, Elke C. Plönjes-Palm, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany); Bernhard Flöter, Klaus Mann, Tobias Mey, Bernd Schäfer, Laser-Lab. Göttingen e.V. (Germany) [8778-39]

K-B bendable system optimization at FERMI@Elettra FEL: impact of different spatial wavelengths on the spot-size, Lorenzo Raimondi, Cristian Svetina, Nicola Mahne, Elettra-Sincrotrone Trieste ScpA (Italy); Daniele Cocco, SLAC National Accelerator Laboratory, 2575 Sand Hill Rd, MS-19 Menlo Park, CA 94025 (United States); Flavio Capotondi, Emanuele Pedersoli, Maya Kiskinova, Elettra-Sincrotrone Trieste ScpA (Italy); Barbara Keitel, Guenter Brenner, Elke C. Plönjes-Palm, Deutsches Elektronen-Synchrotron DESY, Notkestraße 85, 22603 Hamburg, Germany (Germany); Tobias Mey, Klaus Mann, Laser-Lab. Gottingen e.V. (LLG) Hans-Adolf-Krebs-Weg 1, 37077 Gottingen, Germany (Germany); Marco Zangrando, Elettra-Sincrotrone Trieste ScpA (Italy) and CNR – Consiglio Nazionale delle Ricerche Istituto Officina dei Materiali - TASC, S.S. 14 km 163.5 in (Italy) [8778-40]

Parametric beam instability of the electron bunch in a crystal, Aleksandr V Leonov, Andrei Benediktovitch, Belarusian State Univ (Belarus); Dmitriy Ksenzov, Siegen University (Germany); Ilya Feranchuk, Belarusian State Univ (Belarus); Ullrich Pietsch, Siegen University (Germany) [8778-41]

Cross-calibration measurements for online wavelength monitoring at FLASH, Markus Braune, Guenter Brenner, Siarhei Dziarzhyski, P. Juranic, Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8778-42]

Optical afterburner for a SASE FEL, Torsten Golz, Deutsches Elektronen-Synchrotron (Germany); Robert Riedel, Helmholtz-Institut Jena (Germany); A. A. Shemmary, M. Foerst, Franz Tavella, M. Gensch, Evgeny Schneidmiller, Mikhail V. Yurkov, Nicola Stojanovic, Deutsches Elektronen-Synchrotron (Germany) [8778-43]

Photon beam diagnostics at flash, Guenter Brenner, S. Bonfigt, Markus Braune, Ulf Jastrow, Barbara Keitel, Svea Kreis, Hendrik Kuhn, Deutsches Elektronen-Synchrotron (Germany); Matthias Markert, Qimonda Dresden GmbH & Co. OHG (Germany); Andrei A. Sorokin, Physikalisch-Technische Bundesanstalt (Germany); Kai Tiedtke, Deutsches Elektronen-Synchrotron (Germany) [8778-44]

FLASH 2 photon diagnostics and beamline concepts, Marion Kuhlmann, Elke Plönjes, Deutsches Elektronen-Synchrotron (Germany) [8778-45]

Multilens interferometry as an X-ray beam diagnostic technique, Mikhail Lyubomirskiy, Irina I. Snigireva, Gavin Vaughan, Anatoly A. Snigirev, European Synchrotron Radiation Facility (France); Victor G. Kohn, Russian Research Ctr. Kurchatov Institute (Russian Federation); Sergey Kuznetsov, Vyacheslav Yunkin, Institute of Microelectronics Technology and High Purity Materials (Russian Federation); Petr Ershov, Immanuel Kant Baltic Federal Univ. (Russian Federation) [8778-46]

Design of a three-dimensional Ionization Profile Monitor (IPM), Heiko Breede, Martin Sachwitz, Hans-Jürgen Grabosch, Florian Perlick, DESY (Germany) [8778-47]

An electron beam detector for the FLASH II beam dump, Florian Perlick, James Good, Nicole Leuschner, Gero Kube, Martin Sachwitz, Michael Schmitz, Kay Wittenburg, Torsten Wohlenberg, DESY (Germany) [8778-48]

Ultrafast pump-probe X-ray diffraction and spectroscopy at SwissFEL, Chris J Milne, Gerhard Ingold, Paul Beaud, Bill Pedrini, Luc Patthey, Bruce D Patterson, Rafael Abela, Paul Scherrer Institut (Switzerland) [8778-49]

Characterization of the temporal coherence of short intense XUV sources with a wavefront-division interferometer, Annie Klisnick, Limin Meng, A. Le Marec, Univ. Paris-Sud 11 (France) [8778-50]

A split- and delay unit for the European XFEL, Sebastian Røling, Westfälische Wilhelms-Universität Münster (Germany); Stefan Braun, Peter Gawlitza, Fraunhofer IWS Dresden (Germany); Liubov Samoylova, European XFEL GmbH (Germany); Björn Siemer, Westfälische Wilhelms-Universität Münster (Germany); Frank Siewert, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (Germany); Harald Sinn, European XFEL GmbH (Germany); Frank Wahlert, Michael Wöstmann, Helmut Zacharias, Westfälische Wilhelms-Universität Münster (Germany) [8778-51]

Thursday 18 April

Session 4

Room: ZenitThu 8:30 to 10:10

Diagnostics of FEL Radiation I: Electron Beam Diagnostics

Session Chair: **Volker Schlott**, Paul Scherrer Institut (Switzerland)

8:30: **LCLS accelerator operation and measurement of electron parameters relevant for the x-ray beam** (*Invited Paper*), Henrik Loos, SLAC, Stanford Univ. (United States) [8778-18]

9:00: **Comparison of instrumentation for the longitudinal electron bunch profile** (*Invited Paper*), Rasmus Ischebeck, Paul Scherrer Institut (Switzerland) .. [8778-19]

9:30: **Femtosecond-precision stabilisation of the electron bunch arrival time over a large range of bunch charges for FLASH and the European XFEL**, Marie Kristin Czwalińska, S. Pfeiffer, H. Schlarb, C. Schmidt, Sebastian Schulz, Cezary Sydło, Jarosław Szewiński, Deutsches Elektronen-Synchrotron (Germany); Wojciech Jalmuzna, Technical Univ. Lodz (Poland); A. Kuhl, Technische Univ. Darmstadt and DESY (Germany); Aleksandar Angelovski, Andreas Penirschke, Technische Univ. Darmstadt (Germany) [8778-20]

9:50: **Longitudinal bunch profile diagnostics with coherent radiation at FLASH**, Eugen Hass, Univ. of Hamburg (Germany); S. Wesch, The Helmholtz Zentrum Berlin (Germany); Christopher Gerth, Deutsches Elektronen-Synchrotron (Germany); M. Yan, B. Schmidt, DESY (Germany) [8778-21]

Coffee Break Thu 10:10 to 10:40

Session 5

Room: ZenitThu 10:40 to 12:40

Diagnostics of FEL Radiation II: X-ray Beam Diagnostics in the Time Domain

Session Chair: **Christopher Gerth**, Deutsches Elektronen-Synchrotron (Germany)

10:40: **Arrival time diagnostic using free carriers generation induced by X-ray FEL** (*Invited Paper*), M. Harmand, LULI, Ecole Polytechnique (France); Robert Riedel, A. A. Shemmary, DESY (Germany); Mina R. Bionta, Ryan N. Coffee, Mattieu Chollet, Doug French, David Mark Fritz, SLAC National Accelerator Lab. (United States); M. Gensch, Torsten Golz, DESY (Germany); Henrik T. Lemke, SLAC National Accelerator Lab. (United States); N. Medvedev, M. J. Prandolini, DESY (Germany); Klaus Sokolowski-Tinten, Univ. Duisburg-Essen (Germany); Nicola Stojanovic, Sven Toleikis, Ulrike Wegner, Deutsches Elektronen-Synchrotron (Germany); Diling Zhu, SLAC National Accelerator Lab. (United States); Beata Ziaja-Motyka, Franz Tavella, Deutsches Elektronen-Synchrotron (Germany); Marco Cammarata, SLAC National Accelerator Lab. (United States) [8778-22]

11:10: **Single shot spectral measurements for time diagnostic** (*Invited Paper*), Makina Yabashi, Yuichi Inubushi, RIKEN (Japan); Tetsuji Katayama, Tadashi Togashi, Japan Synchrotron Radiation Research Institute (Japan); Takashi Sato, RIKEN (Japan); Kensuke Tono, Japan Synchrotron Radiation Research Institute (Japan) [8778-23]

11:40: **Towards diagnostics of spectral and temporal pulse properties for the European XFEL**, Jan Grünert, Jens Buck, Cigdem Ozkan, Wolfgang Freund, Marc Planas, Serguei Molodtsov, European XFEL GmbH (Germany) [8778-24]

12:00: **Ultrafast laser synchronization at the FERMI@Elettra FEL**, Paolo Sigalotti, Paolo Cinquegrana, Alexander A. Demidovich, Rosen Ivanov, Ivaylo Nikolov, Miltcho B. Danailov, Elettra-Sincrotrone-Trieste S.C.p.A. (Italy) [8778-25]

12:20: **Femtosecond-precision synchronization of the pump-probe optical laser for user experiments at FLASH**, Sebastian Schulz, Marie Kristin Czwalińska, Matthias Felber, Deutsches Elektronen-Synchrotron (Germany); Pawel Predki, Technical Univ. of Lodz (Poland); Sven Schefer, Univ. Hamburg (Germany); H. Schlarb, Ulrike Wegner, Deutsches Elektronen-Synchrotron (Germany) .. [8778-26]

Lunch Break Thu 12:40 to 14:00

Session 6

Room: Zenit **Thu 14:00 to 17:30**

FEL Instrumentation and Sample Related Issues

Session Chair: **Marco Zangrando**, Sincrotrone Trieste S.C.p.A. (Italy)

14:00: Femtosecond optical/hard x-ray timing diagnostics at an FEL: implementation and performance (*Invited Paper*), Henrik T. Lemke, SLAC National Accelerator Lab. (United States); Marco Cammarata, Institut de Physique de Rennes (France); Marion Harmand, Deutsches Elektronen-Synchrotron (Germany); Ryan N. Coffee, Matthieu Chollet, Joseph Robinson, Diling Zhu, Mina R. Bionta, David M. Fritz, James M. Glowina, SLAC National Accelerator Lab. (United States)..... [8778-27]

14:30: Sample refreshment schemes for high repetition rate FEL experiments (*Invited Paper*), Joachim Schulz, European XFEL GmbH (Germany) [8778-28]

15:00: Status of detector development for the European XFEL, Jolanta Sztuk-Dambietz, Markus Kuster, Andreas Koch, Monica Turcato, Steffen Hauf, European XFEL GmbH (Germany)..... [8778-29]

15:20: The AGIPD detector for the European XFEL, Laura Bianco, Deutsches Elektronen-Synchrotron (Germany). [8778-30]

Coffee Break Thu 15:40 to 16:10

16:10: Instrument for single-shot X-Ray emission-spectroscopy experiments, Luca Poletto, Marcello Coreno, Consiglio Nazionale delle Ricerche (Italy); Andrea Di Cicco, Univ. degli Studi di Camerino (Italy); Fabio Frassetto, Univ. degli Studi di Padova (Italy); Paolo Miotti, Consiglio Nazionale delle Ricerche (Italy); Salvatore Stagira, Politecnico di Milano (Italy) [8778-31]

16:30: Coherent diffraction imaging project at FERMI@Elettra: first commissioning results and research opportunities, Flavio Capotondi, Sincrotrone Trieste S.C.p.A. (Italy); Filippo Bencivenga, Synchrotron Trieste S.C.p.A. (Italy); Miltcho B. Danailov, D. Fausti, Luca Giannessi, Emanuele Pedersoli, Nicola Mahne, Lorenzo Raimondi, Cristian Svetina, Marco Zangrando, Maya Kiskinova, Sincrotrone Trieste S.C.p.A. (Italy); Sa? a Bajt, Miriam Barthelmess, Holger Fleckenstein, Henry N. Chapman, Deutsches Elektronen-Synchrotron (Germany); Joachim Schulz, European XFEL GmbH (Germany); S. Schleitzer, Lutz Müller, DESY (Germany); Carsten Nils Gutt, Heidelberg School of Medicine (Germany); Gerhard Gruebel, Deutsches Elektronen-Synchrotron (Germany) [8778-32]

16:50: High purity x-ray polarimetry, Kai Schulze, Helmholtz-Institut Jena (Germany) and Friedrich Schiller University Jena (Germany); Berit Marx, Friedrich Schiller University Jena (Germany); Ingo Uschmann, Friedrich Schiller University Jena (Germany) and Helmholtz-Institut Jena (Germany); Ralf Röhlberger, HASYLAB at DESY (Germany); Gerhard G Paulus, Friedrich Schiller University Jena (Germany) [8778-33]

17:10: X-ray pump - probe experiments with MHz repetition rates, Wolfram Leitenberger, Hengameh Navirian, Univ. Potsdam (Germany); Roman Shayduk, Jewgeni Goldshteyn, Peter Gaal, Helmholtz-Zentrum Berlin (Germany); Matias Bargheer, Univ. Potsdam (Germany), Univ. Potsdam (Germany) [8778-34]

Laser Acceleration of Electrons, Protons, and Ions II

Conference Chairs: **Eric Esarey**, Lawrence Berkeley National Lab. (United States); **Carl B. Schroeder**, Lawrence Berkeley National Lab. (United States); **Wim P. Leemans**, Lawrence Berkeley National Lab. (United States)

Monday 15 April

Opening Remarks

Room: Tycho 13:25 to 13:30

Session 1

Room: Tycho Mon 13:30 to 15:20

Electron Acceleration I

Session Chair: **Eric Esarey**,
Lawrence Berkeley National Lab. (United States)

13:30: **Injection and acceleration of particles in optically shaped gas targets** (*Invited Paper*), Daniel F. Gordon, Dmitri Kaganovich, Michael H. Helle, Antonio C. Ting, U.S. Naval Research Lab. (United States) [8779-1]

14:00: **Numerical modeling of laser-wakefield electron acceleration to multi-GeV energies inside a dielectric capillary tube**, Bhooshan S. Paradkar, Brigitte Cros, Univ. Paris-Sud 11 (France); Patrick Mora, Ecole Polytechnique (France); Gilles Maynard, Univ. Paris-Sud 11 (France) [8779-2]

14:20: **Merging conventional and laser wakefield accelerators**, Benno Zeitler, Univ. Hamburg (Germany); Klaus Flöttmann, Deutsches Elektronen-Synchrotron (Germany); Tim Gehrke, Julia Grebenyuk, Florian J. Grüner, Timon Mehrling, Jens Osterhoff, Matthias Schnepp, Univ. Hamburg (Germany) [8779-3]

14:40: **A high-repetition-rate laser-wakefield accelerator for studies of laser pulse propagation and electron acceleration**, Zhaohan He, John A. Nees, Bixue X. Hou, Univ. of Michigan (United States); Victor Malka, Ecole Nationale Supérieure de Techniques Avancées (France); Karl M. Krushelnick, Univ. of Michigan (United States); Jérôme Faure, Ecole Nationale Supérieure de Techniques Avancées (France); Alexander G. R. Thomas, Univ. of Michigan (United States) [8779-4]

15:00: **Fabrication of three-dimensionally structured plasma waveguide and application to induction of electron injection and betatron oscillation in a laser wakefield electron accelerator**, Yencheng Ho, Te-Sheng Hung, National Central Univ. (Taiwan); Jun-Guan Zhou, National Taiwan Univ. (Taiwan); Hamza Qayyum, Wei-Hsin Chen, National Central Univ. (Taiwan); Jiunn-Yuan Lin, National Chung Cheng Univ. (Taiwan); Hsu-Hsin Chu, National Central Univ. (Taiwan); Jhyhyng Wang, National Taiwan Univ. and Academia Sinica (Taiwan); Szu-Yuan Chen, National Central Univ. and Academia Sinica (Taiwan) [8779-5]

Coffee Break Mon 15:20 to 15:50

Session 2

Room: Tycho Mon 15:50 to 17:20

Electron Acceleration II

Session Chair: **Brigitte Cros**, Univ. Paris-Sud 11 (France)

15:50: **Self-injection and stability in laser-plasma accelerators** (*Invited Paper*), Cédric Thaury, Ecole Polytechnique (France); Sebastien Corde, Ecole Polytechnique (France) and SLAC National Accelerator Lab. (United States); Kim Ta Phuoc, Ecole Nationale Supérieure de Techniques Avancées (France); Agustin Lifschitz, Remi Lehe, Guillaume Lambert, Ecole Polytechnique (France); Antoine Rousse, Victor Malka, Ecole Nationale Supérieure de Techniques Avancées (France) [8779-6]

16:20: **Electron injection and emittance control in laser-plasma accelerators**, Eric Esarey, Carl B. Schroeder, Min Chen, Cameron GR Geddes, Stepan S. Bulanov, Carlo Benedetti, Lule Yu, Sergey Rykovanov, Wim P. Leemans, Lawrence Berkeley National Lab (United States) [8779-7]

16:40: **Controlled magnetic self-injection and electron acceleration towards the energy frontier**, Jorge M. Vieira, Vishwa B. Pathak, Joana L. Martins, Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal); Warren B. Mori, Univ. of California, Los Angeles (United States); Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [8779-8]

17:00: **Laser-plasma accelerated electron beams as drivers for free-electron lasers**, Carl B. Schroeder, Eric Esarey, Jeroen van Tilborg, Lawrence Berkeley National Lab. (United States); Zhirong Huang, Yuantao Ding, SLAC National Accelerator Lab. (United States); Andreas Maier, Florian J. Grüner, DESY (Germany); Wim Leemans, Lawrence Berkeley National Lab. (United States) [8779-9]

Tuesday 16 April

Session 3

Room: Tycho Tue 8:30 to 10:00

Ion Acceleration I

Session Chair: **Markus Roth**,
Kiepenheuer-Institut für Sonnenphysik (Germany)

8:30: **Theoretical studies of collisionless shocks for laser-acceleration of ions** (*Invited Paper*), Anne Stockem, Univ. Técnica de Lisboa (Portugal); Frederico Fiuzza, Lawrence Livermore National Lab. (United States); Elisabetta Boella, Univ. Técnica de Lisboa (Portugal); Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) and Univ. de Lisboa (Portugal); Luis O. Silva, Univ. Técnica de Lisboa (Portugal); Chandrashekhar J. Joshi, Warren B. Mori, Univ. of California, Los Angeles (United States) [8779-10]

9:00: **Onset of relativistically induced transparency in the radiation pressure acceleration regime of intense laser-foil interactions**, Paul McKenna, Ross J. Gray, David C. Carroll, Univ. of Strathclyde (United Kingdom); Chris Murphy, The Univ. of Edinburgh (United Kingdom); Haydn Powell, David MacLellan, Graeme Scott, Univ. of Strathclyde (United Kingdom); Chris Brady, The Univ. of Warwick (United Kingdom); Chris Ridgers, Univ. of Oxford (United Kingdom); Nicola Booth, Robert J. Clarke, David Neely, Rutherford Appleton Lab. (United Kingdom) [8779-11]

9:20: **Transition of proton energy scaling driven by petawatt-laser-plasma interactions**, I Jong Kim, Ki Hong Pae, Chul Min Kim, Hyung Taek Kim, Il Woo Choi, Jae Hee Sung, Seong Ku Lee, Tae Jun Yu, Peter V. Nickles, Tae Moon Jeong, Jongmin Lee, Gwangju Institute of Science and Technology (Korea, Republic of) [8779-12]

9:40: **Prompt pre-thermal laser ion sheath acceleration with ultra-short laser pulses**, Karl Zeil, Josefine Metzkes, Thomas Kluge, Michael Bussmann, Thomas E. Cowan, Stephan D. Kraft, Ulrich Schramm, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany) [8779-13]

Coffee Break Tue 10:00 to 10:30

Session 4

Room: Tycho Tue 10:30 to 12:10

Ion Acceleration II

Session Chair: **Karl M. Krushelnick**, Univ. of Michigan (United States)

10:30: **Generation of 50-MeV/u He ions in laser-driven ion acceleration with cluster-gas targets** (*Invited Paper*), Yuji Fukuda, Hironao Sakaki, Masato Kanasaki, Akifumi Yogo, Satoshi Jinno, Motonobu Tampo, Anatoly Y. Faenov, Tatiana A. Pikuz, Yukio Hayashi, Masaki Kando, Alexander S. Pirozhkov, Takuya Shimomura, Hiromitsu Kirayama, Satoshi Kurashima, Tomihiro Kamiya, Japan Atomic Energy Agency (Japan); Keiji Oda, Tomoya Yamauchi, Kobe Univ. (Japan); Kiminori Kondo, Sergei Bulanov, Japan Atomic Energy Agency (Japan) . . [8779-14]

11:00: **Laser ion acceleration with low density targets: a new path towards high intensity, high energy ion beams** (*Invited Paper*), Marc Glesser, Ecole Polytechnique (France) [8779-15]

11:30: **Simulation studies of radiation-pressure driven light sail and shock acceleration**, Andrea Sgattoni, Politecnico di Milano (Italy) and National Institute of Optics (Italy); Andrea Macchi, Univ. di Pisa (Italy); Tatyana V. Liseykina, Univ. Rostock (Germany); Amritpal S. Nindrayog, Univ. di Pisa (Italy) and National Institute of Optics (Italy); Matteo Tamburini, Max-Planck-Institut für Kernphysik (Germany) and National Institute of Optics (Italy); Francesco Pegoraro, Univ. di Pisa (Italy) and National Institute of Optics (Italy) [8779-16]

11:50: **Evanescent-wave proton accelerator driven by intense THz pulses**, Laszlo Palfalvi, Univ. of Pécs (Hungary); József A. Fülöp, MTA-PTE High-Field Terahertz Research Group (Hungary) and ELI-ALPS (Hungary); György Tóth, Univ. of Pécs (Hungary); János Hebling, Univ. of Pécs (Hungary) and MTA-PTE High-Field Terahertz Research Group (Hungary) [8779-17]

Lunch/Exhibition Break Tue 12:10 to 13:30

Conference 8779A • Room: Tycho (Monday/Tuesday)

Room: Leo (Wednesday)

Session 5

Room: Tycho Tue 13:30 to 15:20

Ion Acceleration III

Session Chair: **Wim Leemans**,
Lawrence Berkeley National Lab. (United States)

13:30: **Laser-accelerated ion pulses for high dose-rate applications** (*Invited Paper*), Jörg Schreiber, Ludwig-Maximilians-Univ. München (Germany) . . . [8779-18]

14:00: **Electron temperature scaling in laser interaction with solids**, Thomas Kluge, Thomas E. Cowan, Alexander Debus, Ulrich Schramm, Karl Zeil, Michael Bussmann, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany) . . . [8779-19]

14:20: **Laser plasma proton acceleration experiments using foam-covered and grating targets**, Andrea Sgattoni, Politecnico di Milano (Italy) and National Institute of Optics (Italy); Tiberio Ceccotti, Vincent Floquet, Commissariat à l'Énergie Atomique (France); Alessandro Zani, Politecnico di Milano (Italy); Ondrej Klimo, Czech Technical Univ. in Prague (Czech Republic); Andrea Macchi, Univ. di Pisa (Italy); Matteo Passoni, Politecnico di Milano (Italy) . . . [8779-20]

14:40: **Energetic negative ion and neutral atom beam generation at passage of laser accelerated high energy positive ions through a liquid spray**, Sargis Ter-Avetisyan, Institute of Physics of the ASCR, v.v.i. (Czech Republic) . . . [8779-21]

15:00: **Ultra-intense laser neutron generation through efficient deuteron acceleration**, Calvin A. Zulick, Univ. of Michigan (United States) . . . [8779-22]

Coffee Break Tue 15:20 to 15:50

Session 6

Room: Tycho Tue 15:50 to 17:50

Electron Acceleration III

Session Chair: **Daniel F. Gordon**,
U.S. Naval Research Lab. (United States)

15:50: **Small-scale laser based electron accelerators for biology and medicine: a comparative study of the biological effectiveness** (*Invited Paper*), Luca Labate, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy); Maria Grazia Andreassi, Consiglio Nazionale delle Ricerche (Italy); Federica Baffigi, Istituto Nazionale di Ottica (Italy); Giuseppina Basta, Ranieri Bizzarri, Andrea Borghini, Giuliana Candiano, Carlo Casarino, Consiglio Nazionale delle Ricerche (Italy); Fabio Di Martino, Azienda Ospedalier Univ. Pisana (Italy); Lorenzo Fulgentini, Istituto Nazionale di Ottica (Italy); Maria Carla Gilardi, Consiglio Nazionale delle Ricerche (Italy); Antonio Giulietti, Istituto Nazionale di Ottica (Italy); Francesco Lenci, Giorgio Russo, Antonella Sgarbossa, Consiglio Nazionale delle Ricerche (Italy); Claudio Traino, Azienda Ospedaliero-Univ. Pisana (Italy); Leonida A. Gizzi, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy) . . . [8779-23]

16:20: **Controlled injection in a wakefield accelerator using colliding laser pulses and plasma density gradients** (*Invited Paper*), Olle Lundh, Lund Univ. (Sweden) . . . [8779-24]

16:50: **Research with the 1 PW BELLA laser facility**, Wim Leemans, Lawrence Berkeley National Lab. (United States) . . . [8779-25]

17:10: **Scattering instabilities and plasma dynamics in laser plasma wakefield accelerators**, Karl M. Krushelnick, Univ. of Michigan (United States) . . . [8779-26]

17:30: **High energy, low energy spread electron bunches produced via colliding pulse injection**, Cameron G.R. Geddes, Lawrence Berkeley National Lab. (United States) . . . [8779-27]

Wednesday 17 April

Session 7

Room: Leo Wed 8:30 to 10:00

Intense Laser-Plasma Interactions

Session Chair: **Florian J. Grüner**,
Ludwig-Maximilians-Univ. München (Germany)

Please note a room change

Conference moves to Leo on Wednesday.

8:30: **Generation of electron beam and betatron x-ray sources from laser-driven atomic clusters** (*Invited Paper*), Liming Chen, Institute of Physics (China) . . . [8779-28]

9:00: **Effective generation of fast particles and short wavelength radiation from nano-structure targets irradiated by relativistic intensity laser pulse**, Alexander Andreev, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany) . . . [8779-29]

9:20: **Coaction of strong electrical fields in laser irradiated thin foils and its relation to field dynamics at the plasma-vacuum interface**, Florian Abicht, Matthias Schnuerer, Julia Braenzel, Gerd Priebe, Alexander Andreev, Christian Koschitzki, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany); Sven Steinke, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany) and Lawrence Berkeley National Lab. (United States); Toma Toncian, Oswald Willi, Heinrich-Heine-Univ. Düsseldorf (Germany); Wolfgang Sandner, Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany) . . . [8779-30]

9:40: **Experimental test of TOF diagnostics for PW class lasers**, Jan Prokupek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) and Czech Technical Univ. in Prague (Czech Republic); Daniele Margarone, Daniel Kramer, Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jiri Limpouch, Czech Technical Univ. in Prague (Czech Republic) and Institute of Physics of the ASCR, v.v.i. (Czech Republic); I Jong Kim, Tae Moon Jeong, Kee Hwan Nam, Gwangju Institute of Science and Technology (Korea, Republic of); Giuseppe Bertuccio, Donatella Puglisi, Politecnico di Milano (Italy); Georg Korn, Institute of Physics of the ASCR, v.v.i. (Czech Republic) . . . [8779-31]

Coffee Break Wed 10:00 to 10:30

Session 8

Room: Leo Wed 10:30 to 12:20

Laser Acceleration of Particles

Session Chair: **Carl B. Schroeder**,
Lawrence Berkeley National Lab. (United States)

Please note a room change

Conference moves to Leo on Wednesday.

10:30: **Bandwidth-stabilized water-window X-ray pulses from a laser-plasma driven undulator** (*Invited Paper*), Andreas Maier, Center for Free-Electron Laser Science (CFEL) (Germany) . . . [8779-32]

11:00: **A bright neutron source driven by a short pulse laser**, Markus Roth, Technische Univ. Darmstadt (Germany) . . . [8779-33]

11:20: **A table-top laser-based source of short, collimated, ultra-relativistic positron beams**, Gianluca Sarri, Queen's Univ. Belfast (United Kingdom) [8779-34]

11:40: **Laser-driven dielectric electron accelerator for radiobiology researches**, Kazuyoshi Koyama, The Univ. of Tokyo (Japan) and High Energy Accelerator Research Organization (Japan); Yosuke Matsumura, Mitsuru Uesaka, Aimidula Aimierding, The Univ. of Tokyo (Japan); Mitsuhiro Yoshida, Takuya Natsui, High Energy Accelerator Research Organization (Japan) . . . [8779-35]

12:00: **Numerical modeling of dielectric laser accelerator structures**, Benjamin Cowan, Robert K. Crockett, Dan T. Abell, Brian T. Schwartz, Stephen D. Webb, Tech-X Corp. (United States) . . . [8779-36]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Thomson Parabola spectrometry as diagnostics of fast ion emission from laser-generated plasmas, Lorenzo L. Torrisi, Mariapompea Cutroneo, Univ. degli Studi di Messina (Italy); Salvatore Cavallaro, Univ. degli Studi di Catania (Italy); Lucio Andò, Univ. degli Studi di Messina (Italy); Jiri Ullschmied, Institute of Plasma Physics of the ASCR, v.v.i. (Czech Republic) . . . [8779-37]

Relativistic electron generation in laser produced ion channels, Neda Naseri, Tech-X Corp. (United States) and Univ. of Alberta (Canada); Denis Pesme, Ecole Polytechnique (France) and Univ. of Alberta (Canada); Wojciech Rozmus, Univ. of Alberta (Canada) . . . [8779-38]

Laser-ion acceleration from transparent overdense plasmas at the Texas Petawatt, Ishay Pomerantz, Joel Blakeney, Lindsay Fuller, Erhard W. Gaul, Gillis Dyer, A. R. Meadows, Chunhua Wang, Todd Ditmire, The Univ. of Texas at Austin (United States); Björn Manuel Hegelich, Donald C. Gautier, Rahul Shah, Daniel Jung, Juan C. Fernandez, Los Alamos National Lab. (United States) . . . [8779-39]

Characterization of laser accelerated electron bunches for potential radiotherapy applications, Lorenzo Fulgentini, Federica Baffigi, Antonio Giulietti, Istituto Nazionale di Ottica (Italy); Luca Labate, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy); Yuji Oishi, Central Research Institute of Electric Power Industry (Japan) and Istituto Nazionale di Fisica Nucleare (Italy) and Istituto Nazionale di Ottica (Italy); Leonida A. Gizzi, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy) [8779-40]

Advanced simulation methods for laser-plasma injectors and acceleration stages, Benjamin Cowan, Estelle Cormier-Michel, Eric Hallman, Neda Naseri, Tech-X Corp. (United States) . . . [8779-41]

Prepulse induced microstructured plasma with melted and solid targets: formation, properties & prospects to relativistic laser-plasma interaction.
Darya Uryupina, Alexey Lar'kin, Konstantin Ivanov, Sergey Shulyapov, Roman Volkov, Andrei Savel'ev, Lomonosov Moscow State Univ. (Russian Federation); Sergey Pikuz, Joint Institute for High Temperatures (Russian Federation); Andrei Brantov, Valery Bychenkov, P.N. Lebedev Physical Institute (Russian Federation); Claude Fourment, Fabien Dorchies, Benoit Chimier, Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France); Franck Gobet, Medhi Tarisien, David Denis-Petit, Fazia Hannachi, Thomas Bonnet, Maud Versteegen, Institut National de Physique Nucléaire et de Physique des Particules (France) [8779-42]

Electron beams generation by laser wakefield acceleration in tapered capillaries. Cristian Ciocarlan, Univ. of Strathclyde (United Kingdom) and Horia Hulubei National Institute of Physics and Nuclear Engineering (Romania); Mark Wiggins, Salima Abu-Azoum, Univ. of Strathclyde (United Kingdom) [8779-43]

Numerical study of shock wave acceleration. Elisabetta Boella, Insituto Superior Técnico (Portugal) [8779-44]

Micro-radiography with a new laser-electron gun. GianCarlo Bussolino, Istituto Nazionale di Ottica (Italy); Anatoly Y. Faenov, Joint Institute for High Temperatures (Russian Federation) and Japan Atomic Energy Agency (Japan); Antonio Giulietti, Istituto Nazionale di Ottica (Italy); Danilo Giulietti, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy); Petra Koester, Istituto Nazionale di Ottica (Italy); Luca Labate, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy); Tadzio Levato, Istituto Nazionale di Ottica (Italy) and Univ. di Roma (Italy) and Institute of Physics of the ASCR, v.v.i. (Czech Republic); Tania Pikuz, Joint Institute for High Temperatures (Russian Federation) and Japan Atomic Energy Agency (Japan); Leonida A. Gizzi, Istituto Nazionale di Ottica (Italy) and Istituto Nazionale di Fisica Nucleare (Italy) [8779-45]

High energy electrons from interaction with a 10 mm gas-jet at FLAME. Gabrielle Grittani, Istituto Nazionale di Ottica (Italy) and INFN (Italy) and Univ. of Pisa (Italy); Maria Pia Anania, Univ. of Strathclyde (United Kingdom); Giancarlo Gatti, Istituto Nazionale di Fisica Nucleare (Italy); Danilo Giulietti, Univ. di Pisa (Italy); Masaki Kando, Japan Atomic Energy Agency (Japan); Miroslav Krus, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Luca Labate, Istituto per i Processi Chimico-Fisici (Italy); T. Levato, Consiglio Nazionale delle Ricerche (Italy); Yu Oishi, RIKEN (Japan); Francesco Rossi, Istituto Nazionale di Fisica Nucleare (Italy); Leonida A. Gizzi, Consiglio Nazionale delle Ricerche (Italy) [8779-46]

Medical Applications of Laser-Generated Beams of Particles II: Review of Progress Made in Recent Years

Conference Chair: **Kenneth W. D. Ledingham**, Univ. of Strathclyde (United Kingdom)

Conference Co-Chairs: **Klaus Spohr**, Univ. of the West of Scotland (United Kingdom); **Paul McKenna**, Univ. of Strathclyde (United Kingdom); **Paul R. Bolton**, Japan Atomic Energy Agency (Japan)

Programme Committee: **Sergei V. Bulanov**, Japan Atomic Energy Agency (Japan); **Thomas E. Cowan**, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); **Wolfgang Enghardt**, Technische Univ. Dresden (Germany); **Jean-Claude Kieffer**, Institut National de la Recherche Scientifique (Canada); **Chang-Ming C. Ma**, Fox Chase Cancer Ctr. (United States); **Victor Malka**, Ecole Nationale Supérieure de Techniques Avancées (France); **Franz Pfeiffer**, Technische Univ. München (Germany); **Markus Roth**, Gesellschaft für Schwerionenforschung GmbH (Germany); **Akifumi Yogo**, Japan Atomic Energy Agency (Japan)

Wednesday 17 April

Opening Remarks

Room: Aquarius 8:25 to 8:30

Thursday 18 April

Session 10

Room: Aquarius Thu 8:30 to 10:00

Medical Applications of Laser-Generated Beams of Particles I

Session Chair: **Kenneth W. D. Ledingham**, Univ. of Strathclyde (United Kingdom)

8:30: **The production of patient dose level ^{99m}Tc medical radioisotope using laser-driven proton beams**, Robert J. Clarke, Sam Dorkings, Rutherford Appleton Lab. (United Kingdom)..... [8779-50]

9:00: **High energy ion acceleration and neutron production using relativistic transparency in solids**, Markus Roth, Technische Univ. Darmstadt (Germany) [8779-51]

9:30: **Radiobiology at ultra-high dose employing laser-driven ions**, Marco Borghesi, Queen's Univ. Belfast (United Kingdom) and Institute of Physics of the ASCR, v.v.i. (Czech Republic); Fiona Hanton, Giuseppe Schettino, Domenico Doria, Satyabrata Kar, Matthew Zpez, Queen's Univ. Belfast (United Kingdom); Kevin Prise, Queen's University (United Kingdom) [8779-52]

Coffee Break Thu 10:00 to 10:30

Session 11

Room: Aquarius Thu 10:30 to 12:00

Medical Applications of Laser-Generated Beams of Particles II

Session Chair: **Paul McKenna**, Univ. of Strathclyde (United Kingdom)

10:30: **First order concept beamline design for particle therapy with laser accelerated protons**, Umar Masood, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Michael Bussmann, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Wolfgang Enghardt, OncoRay - National Ctr. for Radiation Research in Oncology (Germany) and Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany); Leonhard Karsch, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Florian Kroll, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Jörg Pawelke, OncoRay - National Ctr. for Radiation Research in Oncology (Germany) and Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany) [8779-53]

11:00: **Towards laser driven proton therapy of cancer: status of the Dresden program**, Karl Zeil, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Michael Baumann, OncoRay - National Ctr. for Radiation Research in Oncology (Germany) and Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany) and Universitätsklinikum Carl Gustav Carus Dresden (Germany); Elke Beyreuther, Thomas E. Cowan, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Wolfgang Enghardt, OncoRay - National Ctr. for Radiation Research in Oncology (Germany) and Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany) and Universitätsklinikum Carl Gustav Carus Dresden (Germany); Leonhard Karsch, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Stephan D. Kraft, Florian Kroll, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Lydia Laschinsky, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Josefine Metzkes, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Melanie Oppelt, Christian Richter, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Roland Sauerbrey, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Michael Schürer, OncoRay - National Ctr. for Radiation Research in Oncology (Germany); Ulrich Schramm, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Jörg Pawelke, OncoRay - National Ctr. for Radiation Research in Oncology (Germany) and Helmholtz-Zentrum Dresden-Rossendorf e.V. (Germany) [8779-54]

11:30: **Laser-driven nanosecond proton source and its applications**, Jianhui Bin, Klaus Allinger, Ludwig-Maximilians-Univ. München (Germany) and Max-Planck-Institut für Quantenoptik (Germany); Walter Assmann, Guido A. Drexler, Anna A. Friedl, Dietrich Habs, Peter Hinz, Ludwig-Maximilians-Univ. München (Germany); Nicole Humble, Technische Univ. München (Germany); Daniel Kiefer, Max-Planck-Institut für Quantenoptik (Germany); Wenjun Ma, Ludwig-Maximilians-Univ. München (Germany); Doerte Michalski, Michael Molls, Technische Univ. München (Germany); Sabine Reinhardt, Ludwig-Maximilians-Univ. München (Germany); Thomas E. Schmid, Olga Zlobinskaya, Technische Univ. München (Germany); Joerg Schreiber, Ludwig-Maximilians-Univ. München (Germany) and Max-Planck-Institut für Quantenoptik (Germany); Jan J. Wilkens, Technische Univ. München (Germany) [8779-56]

Lunch Break Thu 12:00 to 13:00

Session 12

Room: Aquarius Thu 13:00 to 15:00

Medical Applications of Laser-Generated Beams of Particles III

Session Chair: **Paul R. Bolton**, Japan Atomic Energy Agency (Japan)

13:00: **ELIMED: a new hadron therapy concept based on laser driven ion beams**, G. A. P. Cirrone, Istituto Nazionale di Fisica Nucleare (Italy) and ELI-Beamlines Project (Czech Republic); Daniele Margarone, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Maggiore M., Istituto Nazionale di Fisica Nucleare (Italy) and ELI-Beamlines Project (Czech Republic); Georg Korn, Institute of Physics of the ASCR, v.v.i. (Czech Republic); G. Cuttone, Istituto Nazionale di Fisica Nucleare (Italy); Francesco Schillaci, Istituto Nazionale di Fisica Nucleare (Italy) and ELI-Beamlines Project (Czech Republic); V. Scuderi, ELI-Beamlines Project (Czech Republic) and INFN-LNS (Italy); A. Tramontana, Istituto Nazionale di Fisica Nucleare (Italy); Jan Prokšpek, Andriy Velyhan, Institute of Physics of the ASCR, v.v.i. (Czech Republic); S. B. Jia, Lorenzo Torrisi, Santo Gammino, Istituto Nazionale di Fisica Nucleare (Italy); Marcella Renis, Univ. degli Studi di Catania (Italy); Lorenzo Manti, Univ. Federico II (Italy); Francesco Paolo Romano, INFN-LNS (Italy); Jiri Limpouch, Jan Psikal, Czech Technical Univ. in Prague (Czech Republic); Marco Borghesi, Queen's Univ. Belfast (United Kingdom); Stepan S. Bulanov, Univ. of California/Berkeley (United States); Sergei Bulanov, Japan Atomic Energy Agency (Japan) [8779-63]

13:30: **Post-acceleration of laser-driven protons with a compact high field linac**, Stefano Sinigardi, Francesco Rossi, Istituto Nazionale di Fisica Nucleare (Italy) and Univ. degli Studi di Bologna (Italy); Pasquale Londrillo, Istituto Nazionale di Fisica Nucleare (Italy); Giorgio Turchetti, Istituto Nazionale di Fisica Nucleare (Italy) and Univ. degli Studi di Bologna (Italy); Paul R. Bolton, Japan Atomic Energy Agency (Japan) [8779-57]

14:00: **Recent advances in ion acceleration from ultrathin foils with Petawatt pulses**, Marco Borghesi, Queen's Univ. Belfast (United Kingdom) [8779-58]

14:30: **Laser-ion acceleration from transparent overdense plasmas at the Texas Petawatt**, ishay pomerantz, Joel Blakeney, Gilliss Dyer, Lindsay Fuller, Erhard Gaul, Alexander R Meadows, Chunhua Wang, The University of Texas at Austin (United States); Donald C Gautier, Rahul Shah, Daniel Jung, Juan C Fernandez, Los Alamos National Laboratory (United States); Todd Ditmire, Manuel B Hegelich, The University of Texas at Austin (United States) [8779-59]

Coffee Break Thu 15:00 to 15:30

Session 13

Room: Aquarius Thu 15:30 to 16:30

Medical Applications of Laser-Generated Beams of Particles IV

Session Chair: **Kenneth W. D. Ledingham**,
Univ. of Strathclyde (United Kingdom)

15:30: **Microstructured snow target for quasi-monochromatic high energy proton acceleration**, Arie Zigler, The Hebrew Univ. of Jerusalem (Israel). [8779-60]

16:00: **Measurements and modelisation of the response function of Imaging Plates to protons, electrons, photons and alpha particles**, Thomas Bonnet, Maxime Comet, David Denis-Petit, Franck Gobet, Fazia Hannachi, Medhi Tarisien, Maud Versteegen, Marie-Madeleine Aleonard, Institut National de Physique Nucléaire et de Physique des Particules (France). [8779-62]

PANEL DISCUSSION

Room: Aquarius Thu 16:30 to 17:00

Discussion: Medical Applications of Laser-Generated Beams of Particles

Moderator: **Ken Ledingham**, Univ. of Strathclyde (United Kingdom)

A small international team of experts from multiple research communities will promote and guide establishment of an international centre dedicated to advancing medical applications of laser-generated secondary sources.

On a convergent path toward this objective this special group would highlight and help advance pivotal research in this exciting field at operating and developing laser facilities.

The Panel Discussion will address the key aspects and how to proceed with such a mission and team.

Harnessing Relativistic Plasma Waves as Novel Radiation Sources from Terahertz to X-rays and Beyond III

Conference Chair: **Dino A. Jaroszynski**, Univ. of Strathclyde (United Kingdom)

Programme Committee: **Christoph H. Keitel**, Max-Planck-Institut für Kernphysik (Germany); **Alexander Pukhov**, Heinrich-Heine-Univ. Düsseldorf (Germany); **Antoine Rousse**, Ecole Nationale Supérieure de Techniques Avancées (France); **Zheng-Ming Sheng**, Shanghai Jiao Tong Univ. (China); **Luis Oliveira Silva**, Univ. Técnica de Lisboa (Portugal); **Toshiki Tajima**, Ludwig-Maximilians-Univ. München (Germany); **S. Mark Wiggins**, Univ. of Strathclyde (United Kingdom); **Victor Zamfir**, Horia Hulubei National Institute of Physics and Nuclear Engineering (Romania); **Matthew Zepf**, Queen's Univ. Belfast (United Kingdom)

Wednesday 17 April

Opening Remarks

Room: Leo 13:30 to 13:40

Session 15

Room: Leo Wed 13:40 to 15:00

Plasma-Based Betatron Sources

Session Chair: **Dino A. Jaroszynski**, Univ. of Strathclyde (United Kingdom)

13:40: **Generation of electron beam and betatron x-ray sources from laser-driven atomic clusters** (*Invited Paper*), Liming Chen, Institute of Physics (China) [8779-65]

14:20: **Betatron x-ray production in mixed gases** (*Invited Paper*), Felicie Albert, Bradley B. Pollock, Joseph E. Ralph, Lawrence Livermore National Lab. (United States); Kenneth A. Marsh, Christopher E. Clayton, Jessica Shaw, Chandrashekhar J. Joshi, Siegfried H. Glenzer, Univ. of California, Los Angeles (United States) [8779-66]

Coffee Break Wed 15:00 to 15:30

Session 16

Room: Leo Wed 15:30 to 17:30

New Concepts in Beam and Undulator-Based Sources

Session Chair: **David A. Burton**, Lancaster Univ. (United Kingdom)

15:30: **Longitudinal space charge amplifier** (*Invited Paper*), Evgeny Schneidmiller, Mikhail V. Yurkov, Deutsches Elektronen-Synchrotron (Germany) [8779-67]

16:10: **Generation of attosecond soft x-ray pulses in a longitudinal space charge amplifier** (*Invited Paper*), Mikhail V. Yurkov, Evgeny Schneidmiller, Martin Dohlus, Deutsches Elektronen-Synchrotron (Germany) [8779-68]

16:50: **Longitudinal space charge amplifier driven by a laser-plasma accelerator** (*Invited Paper*), Martin Dohlus, Evgeny Schneidmiller, Mikhail V. Yurkov, Florian J. Grüner, Deutsches Elektronen-Synchrotron (Germany). [8779-69]

Thursday 18 April

Session 17

Room: Leo Thu 8:30 to 10:30

X-ray Sources Based on Backscattering off Relativistic Beams

Session Chair: **John P. Farmer**, Univ. of Strathclyde (Germany)

8:30: **Picosecond narrow bandwidth X-ray pulses from a Laser-Thomson-Backscattering source** (*Invited Paper*), Axel Jochmann, Arie Irman, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany). [8779-70]

9:10: **Single-cycle pulse generation by Thomson-scattering in the MIR to X-Ray spectral ranges** (*Invited Paper*), Zoltán Tibai, György Tóth, József A. Fülöp, János Hebling, Univ. of Pécs (Hungary) [8779-71]

9:50: **Nonlinear Thomson/Compton scattering from GeV laser-wakefield accelerated electron bunches** (*Invited Paper*), Joana L. Martins, Marija Vranic, Jorge M. Vieira, Ricardo A. Fonseca, Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [8779-7]

Coffee Break Thu 10:30 to 11:00

Session 18

Room: Leo Thu 11:00 to 12:20

Radiation Reaction

Session Chair: **Caterina Riconda**, APOLLON (France)

11:00: **Radiation reaction effects on the motion of an electron in an intense laser pulse** (*Invited Paper*), Yevgen Kravets, Adam Noble, Dino A. Jaroszynski, Univ. of Strathclyde (United Kingdom) [8779-73]

11:40: **A new approach to radiation reaction in charged fluids** (*Invited Paper*), David A. Burton, Lancaster Univ. (United Kingdom) [8779-74]

Lunch Break Thu 12:20 to 13:40

Session 19

Room: Leo Thu 13:40 to 15:00

New Concepts in THz to Infrared Sources: Experimental Demonstration and Experimental Advances in Plasma-Based Amplifiers

Session Chair: **Joana L. Martins**, Univ. Técnica de Lisboa (Portugal)

13:40: **700 micro Joule THz pulses from a laser-driven particle accelerator** (*Invited Paper*), Amrutha Gopal, Friedrich-Schiller-Univ. Jena (Germany); Torsten May, Institut für Photonische Technologien e.V. (Germany); Pushkar Singh, Sven Herzer, Wolfgang Ziegler, Gerhard G. Paulus, Albrecht Schmidt, Andreas Reinhard, Friedrich-Schiller-Univ. Jena (Germany); Ulrich Dillner, Hans-Georg Meyer, Institut für Photonische Technologien e.V. (Germany); Anupam Karmakar, Dirk Broemmel, Paul Gibbon, Forschungszentrum Jülich GmbH (Germany). [8779-75]

14:20: **CPA Raman Compton transition: experimental demonstration of ultrashort laser pulse amplification in plasma in the transition regime** (*Invited Paper*), Dino A. Jaroszynski, Gregory Vieux, Xue Yang, Enrico Brunetti, Bernhard Ersfeld, Univ. of Strathclyde (United Kingdom); John P. Farmer, Univ. of Strathclyde (Germany); R. Isaac, Gaurav Raj, Mark Wiggins, Gregor H. Welsh, Silvia Cipiccia, David W. Grant, Univ. of Strathclyde (United Kingdom); M. W. Hur, UNIST (Korea, Republic of); Nuno R. C. Lemos, Univ. Técnica de Lisboa (Portugal); Jorge Miranda Dias, Institute of Systems and Robotics (Portugal). [8779-76]

Coffee Break Thu 15:00 to 15:30

Session 20

Room: Leo Thu 15:30 to 16:50

Theoretical Advances in Plasma-Based Amplifiers

Session Chair: **Mikhail V. Yurkov**, Deutsches Elektronen-Synchrotron (Germany)

15:30: **Kinetic simulations of intense light pulses generated by Brillouin backscattering in laser-plasma interaction** (*Invited Paper*), Caterina Riconda, Ecole Polytechnique/IZEST International Ctr. for Zettawatt-Exawatt Science and Technology Stefan Weber, Julien Fuchs, Livia Lancia, J. R. Marques, Ecole Polytechnique (France); Gérard A. Mourou, Ecole Polytechnique/IZEST International Ctr. for Zettawatt-Exawatt Science and Technology (France) [8779-77]

16:10: **Extension of the aPIC model for simulation of Raman amplification experiments** (*Invited Paper*), John P. Farmer, Institut für Theoretische Physik 1, Heinrich Heine Universität, Düsseldorf (Germany); MinSup Hur, UNIST (Korea, Republic of); Bernhard Ersfeld, Gregory Vieux, Dino A. Jaroszynski, SUPA and University of Strathclyde (United Kingdom) [8779-78]

High-Power, High-Energy, and High-Intensity Laser Technology

Conference Chair: **Joachim Hein**, Friedrich-Schiller-Univ. Jena (Germany)

Programme Committee: **Andy J. Bayramian**, Lawrence Livermore National Lab. (United States); **Jean-Christophe Francis Chanteloup**, Ecole Polytechnique (France); **Klaus Ertel**, Rutherford Appleton Lab. (United Kingdom); **Leonida A. Gizzi**, Consiglio Nazionale delle Ricerche (Italy); **Bruno Le Garrec**, Institute of Physics/ELI Beamlines (France); **Mathias Siebold**, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany)

Monday 15 April

Opening Remarks

Room: Zenit 13:25 to 13:30

Session 1

Room: Zenit Mon 13:30 to 15:30

High Energy Laser Facilities

Session Chair: **Bruno J Le Garrec**,
Institute of Physics/ELI Beamlines (Czech Republic)

13:30: **Orion: a commissioned user facility** (*Invited Paper*), Paul A. Treadwell, Peter M. Allan, Nicholas Cann, Colin N. Danson, Stuart J. Duffield, Stephen P. Elsmere, Ray D. Edwards, David A. Egan, Mark Girling, Edward Gumbrell, Ewan J. Harvey, Matthew P. Hill, David I. Hillier, David J. Hoarty, Lauren Hobbs, Nicholas W. Hopps, Dianne Hussey, Kevin Oades, Steven James, Michael J. Norman, James Palmer, Stefan Parker, David N. Winter, Thomas H. Bett, AWE plc (United Kingdom) [8780-1]

14:00: **Recent developments on the Vulcan High Power Laser Facility** (*Invited Paper*), Ian Musgrave, Alexis Boyle, Robert J. Clarke, Robert Heathcote, Marco Galimberti, David Neely, Margaret M. Notley, Bryn T. Parry, Waseem Shaikh, Trevor B. Winstone, David A. Pepler, Andrew K. Kidd, Cristina Hernandez-Gomez, John L. Collier, Rutherford Appleton Lab. (United Kingdom) [8780-2]

14:30: **Development and application of the Diagnostic Improvement and Verification Apparatus (DIVA) at the Z-Backlighter Laser Facility at Sandia National Laboratories** (*Invited Paper*), Mark W. Kimmel, Matthias Geissel, Patrick K. Rambo, Jens Schwarz, Sandia National Labs. (United States); James MacArthur, John Stahoviak, Sandia Staffing Alliance (United States); John L. Porter, Sandia National Labs. (United States) [8780-3]

15:00: **PEneLOPE: a high peak-power diode-pumped laser system for laser-plasma experiments** (*Invited Paper*), Mathias Siebold, Markus Loeser, Fabian Röser, Daniel Albach, Ulrich Schramm, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany) [8780-4]

Coffee Mon 15:30 to 16:00

Session 2

Room: Zenit Mon 16:00 to 17:30

Cryogenic Lasers

Session Chair: **Paul A. Treadwell**, AWE plc (United Kingdom)

16:00: **DiPOLE: A multi-slab cryogenic diode pumped Yb:YAG amplifier** (*Invited Paper*), Saumyabrata Banerjee, Klaus Ertel, Paul D. Mason, Paul J. Phillips, Justin Greenhalgh, Cristina Hernandez-Gomez, John L. Collier, Rutherford Appleton Lab. (United Kingdom) [8780-5]

16:30: **233 mJ 143 Hz Yb:YAG ceramic cryogenic disk laser**, Evgeny A. Perevezentsev, Ivan B. Mukhin, Olga L. Vadimova, Ivan I. Kuznetsov, Oleg V. Palashov, Efim A. Khazanov, Institute of Applied Physics (Russian Federation) [8780-6]

16:50: **A diode-pumped, cryogenically cooled, femtosecond burst mode CPA laser**, Jörg Körner, Joachim Hein, Martin Kahle, Hartmut Liebetrau, Reinhart Seifert, Diethard Klöpfel, Malte C. Kaluza, Friedrich-Schiller-Univ. Jena (Germany) [8780-7]

17:10: **Multikilowatt cryogenic Faraday isolator with the disk-shaped composite magneto-optical element**, Dmitry S. Zhelezov, Alexey V. Starobor, Ivan B. Mukhin, Oleg V. Palashov, Institute of Applied Physics (Russian Federation) [8780-8]

Tuesday 16 April

Session 3

Room: Zenit Tue 9:00 to 10:20

Ultrashort Pulse Lasers

Session Chair: **Gordon von der Goenna**,
Hellma Materials GmbH (Germany)

9:00: **High-power, picosecond pulse thin-disk lasers in the Hilase project**, Michal Chyla, Taisuke Miura, Martin Smrz, Akira Endo, Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-9]

9:20: **10GW diode-pumped femtosecond laser operation from 1036nm to 1053nm based on Yb:CaF₂**, Antoine Courjaud, Vincent Clet, Amplitude Systèmes (France); Patrice Camy, Jean-Louis Doualan, Richard Moncorgé, Ecole Nationale Supérieure d'Ingenieurs de Caen et Ctr. de Recherche (France); Eric P. Mottay, Amplitude Systèmes (France) [8780-10]

9:40: **Post compression of multi mJ Terawatt femtosecond pulses and generation of attosecond pulses at high energy**, Ondrej Hort, Antoine Dubrouil, Coralie Fourcade-Dutin, Stéphane Petit, Eric Mével, Dominique Descamps, Eric Constant, Univ. Bordeaux 1 (France) [8780-11]

10:00: **Key elements of alignment of the chirped pulse compressor**, Ivan V. Yakovlev, Institute of Applied Physics (Russian Federation) [8780-12]

Coffee Break Tue 10:20 to 10:50

Session 4

Room: Zenit Tue 10:50 to 12:20

Laser Materials

Session Chair: **Ian Musgrave**,
Rutherford Appleton Lab. (United Kingdom)

10:50: **Thermo-optical measurements of ytterbium doped ceramics (Sc₂O₃, Y₂O₃, Lu₂O₃, YAG) and crystals (YAG, CaF₂) at cryogenic temperatures** (*Invited Paper*), Bruno Le Garrec, Academy of Sciences of the Czech Republic (Czech Republic); Vanessa Cardinali, Commissariat à l'Énergie Atomique (France); Gilbert L. Bourdet, Ecole Polytechnique (France) [8780-13]

11:20: **Optical and laser damage properties of Yb³⁺:CaF₂ for laser applications**, Gordon von der Goenna, Thomas Töpfer, Karin Poehl, Andreas Weisleder, Hellma Materials GmbH (Germany); Joachim Hein, Jörg Körner, Friedrich-Schiller-Univ. Jena (Germany) [8780-14]

11:40: **Spectroscopic characterization of various Yb³⁺ doped laser materials at cryogenic temperatures for the development of high energy class diode pumped solid state lasers**, Venkatesan Jambunathan, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jörg Körner, Friedrich-Schiller-Univ. Jena (Germany); Pawel Sikocinski, Martin Divoky, Magdalena Sawicka, Antonio Lucianetti, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Joachim Hein, Friedrich-Schiller-Univ. Jena (Germany); Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-15]

12:00: **Laser-induced damage down to few cycle pulse duration: test bench and measurements**, Marc L. Sentsis, Lasers, Plasmas et Procédés Photoniques (France); Olivier P. Uteza, Nicolas Sanner, Raphael G. C. R. Clady, Aix-Marseille Univ. (France) [8780-16]

Lunch/Exhibition Break Tue 12:20 to 14:00

Conference 8780A • Room: Zenit (Monday/Tuesday)

Room: Aquarius (Wednesday)

Session 5

Room: Zenit Tue 14:00 to 15:20

New Laser Designs

Session Chair: **Matthias Siebold**,
Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany)

14:00: **Multipass amplifiers of Polaris**, Sebastian Keppler, Joachim Hein, Friedrich-Schiller-Univ. Jena (Germany); Marco Homung, Ragnar Bödefeld, Alexander Kessler, Helmholtz Institut Jena (Germany); Christoph Wandt, Max-Planck-Institut für Quantenoptik (Germany); Alexander Sävert, Marco Hellwing, Friedrich-Schiller-Univ. Jena (Germany); Franke Schorcht, Helmholtz Institut Jena (Germany); Malte C. Kaluza, Friedrich-Schiller-Univ. Jena (Germany) [8780-17]

14:20: **Characterization of Yb:YAG active slab media based on a layered structure with different doping levels**, Antonio Lapucci, Marco Ciofini, Istituto Nazionale di Ottica (Italy); Laura Esposito, Leonida A. Gizzi, Jan Hostasa, Luca Labate, Angela Pirri, Guido Toci, Matteo Vannini, Consiglio Nazionale delle Ricerche (Italy) [8780-18]

14:40: **LD-pumped erbium and neodymium lasers with high energy and output beam quality**, Gennady I. Ryabtsev, Vladimir V. Kabanov, Tatiana V. Bezyazychnaya, Alexandr V. Grigor'ev, Maxim V. Bogdanovich, Yahor V. Lebiadok, Kirill V. Lepchenkov, B.I. Stepanov Institute of Physics (Belarus); Andrew V. Ryabtsev, Maxim A. Shchemelev, Belarusian State Univ. (Belarus) [8780-19]

15:00: **10J/1Hz Water-cooled Yb:YAG laser system**, Jian-gang Zheng, Jun Zhang, Zhen-guo Wang, Xiong-wei Yan, Xin-ying Jiang, Deng-sheng Wu, Xiao-ling Tian, Xiong-jun Zhang, Ming-zhong Li, Qi-hua Zhu, China Academy of Engineering Physics (China) [8780-20]

Coffee Break Tue 15:20 to 15:50

Session 6

Room: Zenit Tue 15:50 to 17:10

New Devices

Session Chair: **Evgeny A. Perevezentsev**,
Institute of Applied Physics (Russian Federation)

15:50: **Deformable mirror technologies at adaptive optics/xinetics**, Allan Wirth, Kevin M. Ezzo, Jeffrey L. Cavaco, Northrop Grumman Xinetics (United States) [8780-21]

16:10: **Optimized cooling base for end-pumped solid-state laser rods**, Stavros Boukios, ThyssenKrupp AG (Germany); Christos Evagelatos, Univ. of Athens (Greece); Giorgos Avdikos, Raymetrics S.A. (Greece); Alexandros D. Papayannis, National Technical Univ. of Athens (Greece); Dimitris Papadopoulos, Univ. of Ioannina (Greece); Georgio D. Tzeremes, European Space Agency (Netherlands) [8780-22]

16:30: **Design of a tunable parametric wavelength conversion system between 2 and 3 μ m pumped by a high-average-power Yb:YAG thin-disk laser**, Ondrej Novák, Taisuke Miura, Patricie Severová, Akira Endo, Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-23]

16:50: **The latest developments in switch technology for high energy and RF-operation laser amplifiers in RCLF**, Jun Zhang, Jian-gang Zheng, Xiong-jun Zhang, Deng-sheng Wu, Xiao-ling Tian, Kuixing Zheng, China Academy of Engineering Physics (China) [8780-24]

Wednesday 17 April

Session 7

Room: Aquarius Wed 9:00 to 10:20

Lasers for Advanced Applications

Session Chair: **Sebastian Keppler**,
Friedrich-Schiller-Univ. Jena (Germany)

Please note a room change

Conference moves to Aquarius on Wednesday.

9:00: **Preliminary experimental and simulation results of the ESA QOMA project: a new DPSS laser source suitable for space applications**, George Tsaknakis, National Technical Univ. of Athens (Greece); Dimitris N. Papadopoulos, Ecole Nationale Supérieure de Techniques Avancées (France); Christos Evagelatos, Paraskevas Bakopoulos, Univ. of Athens (Greece); Georgios K. Avdikos, National Technical Univ. of Athens (Greece); Loïc Deyra, Univ. Paris-Sud 11 (France); François Balembois, Patrick Georges, Lab. Charles Fabry (France); Alexandros D. Papayannis, National Technical Univ. of Athens (Greece); Stavros Boukios, ThyssenKrupp AG (Germany); Georgios D. Tzeremes, European Space Agency (Netherlands) [8780-25]

9:20: **Highly efficient, diode-side-pumped Nd:YLF laser emitting in fundamental mode at 1313 nm, based on the double-beam-mode-controlling (DBMC) technique**, Niklaus U. Wetter, Márcio A. P. Aparicio Lopez, Instituto de Pesquisas Energéticas e Nucleares (Brazil); Alessandro M. Deana, UNINOVE (Brazil) [8780-26]

9:40: **Powerful UV generation in the picosecond pulse trains for the CLIC drive beam photo-injector option**, Mikhail Martyanov, CERN (Switzerland); Marta Csatari Divall, Paul Scherrer Institut (Switzerland); Ekaterina Gacheva, Institute of Applied Physics (Russian Federation); Christoph Hessler, Valentin Fedosseev, CERN (Switzerland) [8780-27]

10:00: **Generation of 3D ellipsoidal shaped UV laser pulses for the future XFEL low-emittance photo-injector**, Anatoly K. Poteomkin, Alexey V. Andrianov, Ekaterina Gacheva, Victor Zelenogorsky, Sergey Y. Mironov, Efim A. Khazanov, Institute of Applied Physics (Russian Federation); Mikhail Martyanov, CERN (Switzerland); Evgeny M. Syresin, Joint Institute for Nuclear Research (Russian Federation); Mikhail Krasilnikov, Frank Stephan, DESY (Germany) [8780-28]

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Stoichiometric improvement of TiO₂ optical films by using time temperature gradient annealing, Alireza Bananej, Nuclear Science and Technology Research Institute (Iran, Islamic Republic of); Zohreh Parsa, Kharazmi Univ. (Iran, Islamic Republic of); Mahdieh Khatiry, Ali Sajedi, Nuclear Science and Technology Research Institute (Iran, Islamic Republic of) [8780-29]

Modeling and optimization of thin disk structure for high power sub-joule laser, Patricie Severová, Akira Endo, Tomás Mocek, Taisuke Miura, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-30]

Investigation of Yb:LuAG crystals with high dopant concentration, Jan Sulc, Zbynek Hubka, Helena Jelínková, Czech Technical Univ. in Prague (Czech Republic); Karel Nejezchleb, Václav Skoda, Crytur Ltd. (Czech Republic) . [8780-31]

Experimental and numerical of the thermal deformation of water-cooled laser mirror under high power density laser irradiation, Panpan Hu, Haihong Zhu, Huazhong Univ. of Science and Technology (China); Xiaoyan Zeng, Huazhong University of Science and Technology (China); Chongwen He, Jie Yin, Linda Ke, Huazhong Univ. of Science and Technology (China) [8780-34]

Characterization of diode-laser stacks for high-energy-class solid state lasers, Pawel Sikocinski, Martin Divoky, Antonio Lucianetti, Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-35]

Theoretical and experimental analysis of passively Q-switched Nd:YAG rod, slab and tube laser systems, Ion I. Lancranjan, INCAS - National Institute for Aerospace Research Elie Carafoli (Romania); Roxana S. Savastru, Dan M. Savastru, Sorin I. Miclos, National Institute of Research and Development for Optoelectronics (Romania) [8780-36]

Simulation of performance of wavefront correction using deformable mirror in high-average-power laser systems, Jan Pilar, Martin Divoky, Pawel Sikocinski, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Viliam Kmetik, Ondrej Slezak, Institute of Physics of the ASCR vvi (Czech Republic); Antonio Lucianetti, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Stefano Bonora, CNR-IFN, Padova, Italy (Italy); Tomás Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-37]

Novel method of single shot M2 measurement for high energy laser pulses in the near-infrared region, Siva Sankar Nagisetty, Taisuke Miura, Akira Endo, Tomáš Mocek, Institute of Physics of the ASCR, v.v.i. (Czech Republic) . [8780-38]

Simple measurement of picosecond pulses at wavelengths above 1 micron, Martin Smrz, Taisuke Miura, Akira Endo, Tomás Mocek, Petr Straka, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-39]

Research Using Extreme Light: Entering New Frontiers with Petawatt-Class Lasers

Conference Chairs: **Georg Korn**, ELI Beamlines, Institute of Physics of the ASCR, v.v.i (Czech Republic); **Luis Oliveira Silva**, Univ. Técnica de Lisboa (Portugal)

Programme Committee: **Sergei V. Bulanov**, Japan Atomic Energy Agency (Japan); **Todd Ditmire**, The Univ. of Texas at Austin (United States); **Peter Dombi**, Wigner Research Ctr. for Physics of the H.A.S. (Hungary); **Nelson C. Lopes**, Univ. Técnica de Lisboa (Portugal); **Cristina Hernandez-Gomez**, Rutherford Appleton Lab. (United Kingdom); **Mattias Marklund**, Umeå Univ. (Sweden); **Nikolay Narozhny**, National Research Nuclear Univ. MEPhI (Russian Federation); **David Neely**, Rutherford Appleton Lab. (United Kingdom); **Florin Negoita**, Horia Hulubei National Institute of Physics and Nuclear Engineering (Romania); **Alexander Pukhov**, Heinrich-Heine-Univ. Düsseldorf (Germany); **Johann Rafelski**, The Univ. of Arizona (United States); **Bedrich Rus**, Institute of Physics of the ASCR, v.v.i. (Czech Republic); **Toshiki Tajima**, Ludwig-Maximilians-Univ. München (Germany); **Matthew Zepf**, Queen's Univ. Belfast (United Kingdom)

Monday 15 April

Opening Remarks

Room: Kepler 13:30 to 13:40

Session 11

Room: Kepler Mon 13:40 to 17:30

High-Field Physics and Simulations I

13:40: **From atomic to subatomic worlds: science and applications** (*Keynote Presentation*), Gérard A. Mourou, IZEST, Ecole Nationale Supérieure de Techniques Avancées (France) [8780-50]

14:20: **On the extreme field limits in the high power laser matter interactions** (*Invited Paper*), Sergei Bulanov, Japan Atomic Energy Agency (Japan); Georg Korn, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-51]

14:50: **Multiscale simulation of laser driven electron-positron-photon plasma**, Nina Elkina, Ludwig-Maximilians-Univ. München (Germany) [8780-72]

Coffee Break Mon 15:10 to 15:50

15:50: **Large-scale simulations of laser-plasma interaction: state of the art and next steps** (*Invited Paper*), Michael Bussmann, Heiko Baur, René Widera, Axel Hübl, Richard Pausch, Alexander Debus, Thomas Kluge, Ulrich Schramm, Thomas E. Cowan, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany); Felix Schmitt, NVIDIA Corp. (United States); Guido Juckeland, Wolfgang Nagel, Technische Univ. Dresden (Germany) [8780-53]

16:20: **TBA** (*Invited Paper*), Mattias Marklund, Umeå Univ. (Sweden) [8780-54]

16:50: **On the path to pair production: self-consistent multidimensional PIC modeling**, Thomas Grismayer, Joana L. Martins, Univ. Técnica de Lisboa (Portugal); Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) and Univ. de Lisboa (Portugal); Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [8780-55]

17:10: **Effect of the radiation reaction in classical regimes of ultra-strong electromagnetic fields in plasmas**, Remi Capdessus, Emmanuel d'Humières, Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [8780-56]

Tuesday 16 April

Session 12

Room: Kepler Tue 8:40 to 10:10

Secondary Sources Generated by High-Power Lasers

8:40: **Secondary source generation using 30-fs, PW Ti:sapphire laser (PULSER)** (*Invited Paper*), Tae Moon Jeong, APRI-GIST (Korea, Republic of) [8780-57]

9:10: **Coherent synchrotron emission from nanofoil targets** (*Invited Paper*), Matthew Zepf, Queen's Univ. Belfast (United Kingdom) [8780-58]

9:40: **Adaptive attosecond pulse control with synthesized light** (*Invited Paper*), Balázs Bódi, Wigner Research Ctr. for Physics of the H.A.S. (Hungary); Emeric Balogh, Univ. of Szeged (Hungary); Valer Tosa, National Institute for Research and Development of Isotopic and Molecular Technologies (Romania); Katalin Varju, Univ. of Szeged (Hungary); Peter Dombi, Wigner Research Ctr. for Physics of the H.A.S. (Hungary) and Max-Planck-Institut für Quantenoptik (Germany) [8780-59]

Coffee Break Tue 10:10 to 10:30

Session 13

Room: Kepler Tue 10:30 to 12:50

Extreme Light Sources and Facilities

10:30: **ELI-Beamlines status** (*Invited Paper*), Georg Korn, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-60]

11:00: **Realisation and status of the European XFEL facility** (*Invited Paper*), Thomas Tschentscher, European XFEL GmbH (Germany) [8780-61]

11:30: **ELI-ALPS: The attosecond ELI infrastructure** (*Invited Paper*), Károly Osvay, ELI-Hu Nkft. (Hungary) and University of Szeged (Hungary); Charalambidis Dimitris, ELI-Hu Nkft. (Hungary) and FORTH, Crete (Greece); Zsolt Diveki, ELI-Hu Nkft. (Hungary) and Imperial College, London (United Kingdom); Peter Dombi, ELI-Hu Nkft. (Hungary) and Wigner Research Centre for Physics, Budapest (Hungary); Max-Planck-Institut für Quantenoptik, Garching (Germany); Jozsef A Fulop, ELI-Hu Nkft. (Hungary) and MTA-PTE Research Group on THz, Pecs (Hungary); Mikhail P Kalashnikov, ELI-Hu Nkft. (Hungary) and Max-Born-Institut, Berlin (Germany); Rodrigo Lopez-Martens, ELI-Hu Nkft. (Hungary) and Laboratoire d'Optique Appliquée, Palaiseau (France); Ervin Racz, ELI-Hu Nkft. (Hungary) and Obuda University, Budapest (Hungary) [8780-62]

12:00: **Extreme Light Infrastructure-Nuclear Physics (ELI-NP): present status and perspectives** (*Invited Paper*), Nicolae V. Zamfir, Horia Hulubei National Institute of Physics and Nuclear Engineering (Romania) [8780-63]

12:30: **Advanced Laser Light Source (ALLS) facility: recent achievements and future perspectives** (*Invited Paper*), Jean-Claude Kieffer, Institut National de la Recherche Scientifique (Canada) [8780-91]

Lunch/Exhibition Break Tue 12:50 to 13:50

Session 14

Room: Kepler Tue 13:50 to 17:40

High-Field Physics and Simulations II

13:50: **Dense electron-positron plasmas generated by 10PW lasers in the QED-plasma regime** (*Invited Paper*), Christopher P. Ridgers, Univ. of Oxford (United Kingdom) [8780-64]

14:20: **Nature of the strong field capabilities of lasers** (*Invited Paper*), Howard R. Reiss, American Univ. (United States) and Max-Born-Institut für Nichtlineare Optik und Kurzzeitspektroskopie (Germany) [8780-65]

14:50: **Kapitza-Dirac effect and nonresonant nonlinear quantum interaction of laser and electron beams**, Heinrich Hora, The Univ. of New South Wales (Australia); Peter H. Handel, Univ. of Missouri-St. Louis (United States) [8780-66]

15:10: **Laser leptons with LMJ-PETAL and ELI Beamlines**, Ladislav Drska, Czech Technical Univ. in Prague (Czech Republic); Emmanuel d'Humières, Univ. Bordeaux 1 (France); Vaclav Hanus, Milan Sinor, Czech Technical Univ. in Prague (Czech Republic); Vladimir T. Tikhonchuk, Univ. Bordeaux 1 (France) [8780-67]

Coffee Break Tue 15:30 to 16:00

16:00: **Full-scale 3D PIC simulations in the radiation reaction dominated regime with ELI lasers**, Marija Vranic, Joana L. Martins, Jorge M. Vieira, Univ. Técnica de Lisboa (Portugal); Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) and Univ. de Lisboa (Portugal); Luis O. Silva, Univ. Técnica de Lisboa (Portugal) [8780-68]

16:20: **The radiation reaction effect in ultra intense laser interactions with foils: laser absorption**, Martin Jirka, Ondrej Klimo, Jiri Limpouch, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Martin Masek, Institute of Physics (Czech Republic); Georg Korn, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Michael Bussmann, Helmholtz-Zentrum Dresden-Rossendorf e. V. (Germany) [8780-69]

16:40: **Nonlinear double Compton scattering in the ultrarelativistic quantum regime**, Felix Mackenroth, Max-Planck-Institut für Kernphysik (Germany); Antonino Di Piazza, Max-Planck-Institut für Kernphysik (Germany) [8780-70]

17:00: **Computational relativistic quantum dynamics and its application to relativistic tunneling and Kapitza-Dirac scattering**, Heiko Bauke, Michael Klaiber, Enderalp Yakobovlu, Karen Z. Hatsagortsyan, Sven Arens, Carsten Müller, Christoph H. Keitel, Max-Planck-Institut für Kernphysik (Germany) [8780-71]

17:20: **Energy transfer in counter-propagating plasmas at sub-relativistic velocities**, Vladimir T. Tikhonchuk, Remi Capdessus, Emmanuel d'Humières, Sophie Jequier, Stanley P. Davis, Univ. Bordeaux 1 (France) [8780-87]

15:50: **Collective electron interaction at ultrafast acceleration of plasma blocks** (*Invited Paper*), Heinrich Hora, The Univ. of New South Wales (Australia) [8780-86]

16:20: **Critical acceleration: probing elementary interactions in laser-electron scattering** (*Invited Paper*), Johann Rafelski, The Univ. of Arizona (United States) [8780-52]

16:50: **Generation of multi-GeV electron beam using PW laser system**, Hyung Taek Kim, Ki H. Pae, H. J. Cha, I Jong Kim, Tae Jun Yu, S. K. Lee, Jae Hee Sung, Jungwon Yoon, Tae Moon Jeong, Jongmin Lee, Gwangju Institute of Science and Technology (Korea, Republic of) [8780-88]

17:10: **Laser ion acceleration: from present to intensities achievable at ELI-Beamlines**, Jiri Limpouch, Czech Technical Univ. in Prague (Czech Republic) [8780-89]

Wednesday 17 April

Session 15

Room: Kepler Wed 8:50 to 12:40

High-Power Intense Laser Sources with Enhanced Repetition Rates

8:50: **Developments toward rep-rated multi-PW to exawatt lasers** (*Invited Paper*), Todd Ditmire, The Univ. of Texas at Austin (United States) [8780-73]

9:20: **ELI-Beamlines laser systems: design options and status** (*Invited Paper*), Bedrich Rus, Pavel Bakule, Daniel Kramer, Jonathan T. Green, Jakub Novak, Martin Fibrich, Frantisek Batysta, P. Korous, Martin Laub, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-74]

9:50: **Technology development for multi-PW CPA and OPCPA based laser systems**, Ian Musgrave, Alexis Boyle, John L. Collier, Robert J. Clarke, Robert Heathcote, Cristina Hernandez-Gomez, Chris J. Hooker, Marco Galimberti, Andrey Lyachev, Dave Neely, Peter A. Norreys, Bryn T. Parry, Rajeev P. Pattathil, Ian N. Ross, Waseem Shaikh, Yunxin Tang, Trevor B. Winstone, Rutherford Appleton Lab. (United Kingdom) [8780-76]

10:10: **Design of kW level picosecond compressor of pump pulses for high power OPCPA**, Pavel Bakule, Institute of Physics of the ASCR v.v.i. (Czech Republic); Jakub Novak, Daniel Kramer, P. Strkula, Efstratios Koutris, T. Base, Frantisek Batysta, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jonathan T. Green, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Bedrich Rus, Institute of Physics of the ASCR, v.v.i. (Czech Republic) . . . [8780-77]

Coffee Break Wed 10:30 to 11:00

11:00: **DiPOLE: a scalable laser architecture for pumping multi-Hz PW systems**, Klaus Ertel, Rutherford Appleton Lab. (United Kingdom) [8780-78]

11:20: **Plasma mirrors and applications at relativistic intensities**, David Neely, Rutherford Appleton Lab. (United Kingdom) [8780-79]

11:40: **Requirements and test capabilities for the damage threshold of optical surfaces in the ELI-beamlines facility**, Daniel Kramer, Rui Nuno Almeida De Sá Barros, Bedrich Rus, Jan Hrebicek, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Tomas Medrik, Univ. Palackého V Olomouci (Czech Republic); Efstratios Koutris, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8780-80]

12:00: **Microtargetry for next generation PW-class lasers**, Martin K. Tolley, Rutherford Appleton Lab. (United Kingdom) [8780-81]

12:20: **Thin disk picosecond pump laser for jitter stabilized kHz OPCPA**, Jakub Novak, Pavel Bakule, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jonathan T. Green, Institute of Physics ASCR, v.v.i. (Czech Republic); Jan Hrebicek, Institute of Physics of the ASCR, v.v.i. (Czech Republic); Jack Naylor, Institute of Physics ASCR, v.v.i. (Czech Republic); Tomas Mazanec, Michal Vitek, Bedrich Rus, Institute of Physics of the ASCR, v.v.i. (Czech Republic) . . . [8780-82]

Lunch/Exhibition Break Wed 12:40 to 14:00

Session 16

Room: Kepler Wed 14:00 to 17:30

Acceleration of Particles using High-Power PW-Class Lasers

14:00: **TBA targets for electron acceleration with ELI laser beams** (*Invited Paper*), Nelson C. Lopes, Univ. Técnica de Lisboa (Portugal) [8780-83]

14:30: **Petascale simulations of laser plasma accelerators at ELI regimes** (*Invited Paper*), Ricardo A. Fonseca, Univ. Técnica de Lisboa (Portugal) . . [8780-84]

15:00: **Enhanced TNSA acceleration with 0.1-1 PW lasers**, Daniele Margarone, Institute of Physics of the ASCR (Czech Republic); Ondrej Klimo, CTU (Czech Republic); I Jong Kim, APRI-GIST (Korea, Republic of); Jan Prokupek, Institute of Physics of the ASCR (Czech Republic); Jiri Limpouch, CTU (Czech Republic); Tae Moon Jeong, APRI-GIST (Korea, Republic of); Tomas Mocek, Institute of Physics of the ASCR (Czech Republic); Jan Psikal, CTU (Czech Republic); Hyung Taek Kim, APRI-GIST (Korea, Republic of); Jan Proška, CTU (Czech Republic); Kee Wan Nam, APRI-GIST (Korea, Republic of); Tadzio Levato, Institute of Physics of the ASCR (Czech Republic); Lucie Stolcova, CTU (Czech Republic); Seong Ku Lee, APRI-GIST (Korea, Republic of); Miroslav Krus, Institute of Physics of the ASCR (Czech Republic); Jae Hee Sung, Tae Jun Yu, APRI-GIST (Korea, Republic of); Georg Korn, Institute of Physics of the ASCR (Czech Republic) [8780-85]

Coffee Break Wed 15:20 to 15:50

Poster Session

Meridian Hall Wed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Energetic study of focused ultrashort Gaussian beams, Luis Carretero López, Pablo Acebal González, Salvador Blaya, Roque Fernando Madrigal, Antonio Fimia-Gil, Univ. Miguel Hernández de Elche (Spain) [8780-75]

A LIF scheme for HIPER application based on the combination of ultrahigh laser nonlinear force driven plasma blocks and the relativistic acceleration of ions blocks, Stavros Moustazis, Technical Univ. of Crete (Greece); Paraskevas Lalousis, Foundation for Research and Technology-Hellas (Greece); Heinrich Hora, The Univ. of New South Wales (Australia) [8780-90]

Integrated Optics: Physics and Simulations

Conference Chairs: **Pavel Cheben**, National Research Council Canada (Canada); **Jiri Ctyroky**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); **Iñigo Molina-Fernandez**, Univ. de Málaga (Spain)

Programme Committee: **Roel G. Baets**, Univ. Gent (Belgium); **Trevor Mark Benson**, The Univ. of Nottingham (United Kingdom); **Hung-Chun Chang**, National Taiwan Univ. (Taiwan); **Christopher R. Doerr**, Acacia Communications Inc. (United States); **Romuald Houdré**, Ecole Polytechnique Fédérale de Lausanne (Switzerland); **Raman Kashyap**, Ecole Polytechnique de Montréal (Canada); **Christophe Kazmierski**, III-V Lab. (France); **Philippe Lalanne**, Institut d'Optique Graduate School (France); **Xaveer Leijtens**, Technische Univ. Eindhoven (Netherlands); **Andrea I. Melloni**, Politecnico di Milano (Italy); **Jarmila Mullerova**, Univ. of Zilina (Slovakia); **Martin Schell**, Fraunhofer-Institut für Nachrichtentechnik Heinrich-Hertz-Institut (Germany); **Laurent Vivien**, Institut d'Électronique Fondamentale (France); **Lech Wosinski**, Royal Institute of Technology (Sweden); **Danxia Xu**, National Research Council Canada (Canada)

Wednesday 17 April

Opening Remarks

Room: Nadir **8:15 to 8:20**

Session 1

Room: Nadir **Wed 8:20 to 10:20**

Integrated Photonics Design I

Session Chair: **Jiri Ctyroky**, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic)

8:20: **Integrated design for integrated photonics: from the physical to the circuit level and back** (*Invited Paper*), Wim Bogaerts, Martin Fiers, Antonio Ribeiro, Univ. Gent (Belgium) [8781-1]

8:50: **Advances in integrated quantum photonics** (*Invited Paper*), Damien Bonneau, Josh W. Silverstone, Pete Shadbolt, Alberto Peruzzo, Jonathan C. Matthews, Jeremy L. O'Brien, Mark G. Thompson, Univ. of Bristol (United Kingdom) [8781-36]

9:20: **Analysis of parasitic effects in PICs using circuit simulation**, Emil Kleijn, Meint K. Smit, Xaveer J. M. Leijtens, Technische Univ. Eindhoven (Netherlands) [8781-2]

9:40: **Thermo-optic simulations of silicon nitride/polymer hybrid waveguides**, Ziyang Zhang, Dongliang Liu, Norbert Keil, Norbert Grote, Fraunhofer-Institut für Nachrichtentechnik Heinrich-Hertz-Institut (Germany) [8781-3]

10:00: **Numerical simulation of multi-splitting widely tunable filter on SOI**, Andrey Tsarev, A.V. Rzhavov Institute of Semiconductor Physics (Russian Federation) [8781-4]

Coffee Break Wed 10:20 to 10:50

Session 2

Room: Nadir **Wed 10:50 to 12:40**

Silicon Integrated Photonics

Session Chair: **Goran Z. Mashanovich**, Univ. of Southampton (United Kingdom)

10:50: **Silicon integrated optoelectronics** (*Invited Paper*), Michael Hochberg, Univ. of Delaware (United States) [8781-5]

11:20: **Fourier-transform spectrometer chip with silicon spiral waveguides**, Pavel Cheben, National Research Council Canada (Canada); Aitor V. Velasco, Univ. Complutense de Madrid (Spain); Przemek J. Bock, Jens Schmid, Jean Lapointe, André Delage, Siegfried Janz, National Research Council Canada (Canada); Maria L. Calvo, Univ. Complutense de Madrid (Spain); Dan-Xia Xu, National Research Council Canada (Canada); Mirek Florjanczyk, York Univ. (Canada) [8781-6]

11:40: **A general approach for robust integrated polarization rotators**, Carlos A. Alonso Ramos, Robert Halir, Alejandro Ortega-Moñux, Univ. de Málaga (Spain); Pavel Cheben, National Research Council Canada (Canada); Laurent Vivien, Institut d'Électronique Fondamentale (France); Iñigo Molina-Fernández, Univ. de Málaga (Spain); Delphine Marris-Morini, Institut d'Électronique Fondamentale (France); Siegfried Janz, Dan-Xia Xu, Jens Schmid, National Research Council Canada (Canada) [8781-7]

12:00: **Design and analysis of ultra-small radius microring resonator**, Cheng Yu Wang, National Sun Yat-Sen Univ. (Taiwan); Chih Wei Tseng, National Tsing Hua Univ. (Taiwan); Yung Jui Chen, National Sun Yat-Sen Univ. (Taiwan) . . . [8781-8]

12:20: **Analysis of couplers between photonic nanowires and subwavelength grating waveguides**, Jiri Ctyroky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Pavel Kwiecien, Ivan Richter, Czech Technical Univ. in Prague (Czech Republic); Pavel Cheben, National Research Council Canada (Canada) [8781-9]

Lunch/Exhibition Break Wed 12:40 to 13:40

Session 3

Room: Nadir **Wed 13:40 to 15:30**

Integrated Active Devices I

Session Chair: **Michael Hochberg**, Univ. of Delaware (United States)

13:40: **Self-tuned laser cavity: from a network-embedded configuration to silicon integration** (*Invited Paper*), Alban Le Liepvre, Romain Brenot, Alcatel-Thales III-V Lab. (France) [8781-10]

14:10: **Simultaneous optimization of confinement and thermal performance for heteroepitaxial InP on Sol hybrid lasers**, Cheng-Xin Pang, Mondher Besbes, Henri Benisty, Lab. Charles Fabry (France) [8781-11]

14:30: **Modelling and characterization of heteroepitaxially bonded InP-based structured on Sol for hybrid lasers**, Cheng-Xin Pang, Mondher Besbes, Lab. Charles Fabry (France); Anne Talneau, Ahmad Itawi, Lab. de Photonique et de Nanostructures (France); Guang-Hua Duan, Alain Accard, Francois Lelarge, Alcatel-Thales III-V Lab. (France); Henri Benisty, Lab. Charles Fabry (France) [8781-12]

14:50: **Dual-wavelength operation of monolithically integrated arrayed waveguide grating lasers for optical heterodyning**, Robinson C. Guzman, Alvaro Jimenez, Univ. Carlos III de Madrid (Spain); Katarzyna Lawniczuk, Technical Univ. of Eindhoven (Netherlands) and Warsaw Univ. of Technology (Poland); Antonio Corradi, Xaveer J. M. Leijtens, Erwin A. J. M. Bente, Technische Univ. Eindhoven (Netherlands); Guillermo Carpintero, Univ. Carlos III de Madrid (Spain) . . . [8781-13]

15:10: **Chirp reduction and on/off contrast enhancement via optical injection locking and coherent carrier manipulation**, Radan Slavik, Univ. of Southampton (United Kingdom); Joseph Kakande, Alcatel-Lucent Bell Labs. (United States); Richard Phelan, John O'Carroll, Brian Kelly, Eblana Photonics Ltd. (Ireland); David J. Richardson, Optoelectronics Research Ctr. (United Kingdom) [8781-14]

Coffee Break Wed 15:30 to 16:00

Session 4

Room: Nadir **Wed 16:00 to 17:40**

Integrated Active Devices II

Session Chair: **Lars Thylén**, Royal Institute of Technology (Sweden)

16:00: **Efficient wavelength conversion in integrated structures: novel applications** (*Invited Paper*), Roberto Morandotti, Marco Peccianti, Alessia Pasquazi, Matteo Clerici, Lucia Caspani, Chris Reimer, Institut National de la Recherche Scientifique (Canada); Sai-Tak Chu, Brent E. Little, Infinera Corp. (United States); David J. Moss, The Univ. of Sydney (Australia) [8781-15]

16:30: **Nonlinear interactions of a supercontinuum and a weak laser to measure high order dispersion** (*Invited Paper*), Juan A. Castañeda, Univ. Estadual de Campinas (Brazil); Andrés Gil-Molina, Univ. de Antioquia (Colombia); Ana M. Cardenas, Univ. of Antioquia (Colombia); Hugo L. Fragnito, Univ. Estadual de Campinas (Brazil) [8781-16]

17:00: **Selective amplification of frequency comb modes via optical injection locking of a semiconductor laser: influence of adjacent unlocked comb modes**, David S. Wu, David J. Richardson, Radan Slavik, Optoelectronics Research Ctr. (United Kingdom) [8781-17]

17:20: **Enhancement of the optical power stimulated by impact ionization in GaSb-based heterostructures with deep quantum wells**, Maya P. Mikhailova, Geogry G. Zegrya, Leonid V. Danilov, Eduard V. Ivanov, Karina V. Kalinina, Nikolay D. Stoyanov, Yuri P. Yakovlev, Ioffe Physico-Technical Institute (Russian Federation); Eduard Hulicius, Alice Hospodkova, Jiri Pangrac, Maria Zikova, Institute of Physics of the ASCR, v.v.i. (Czech Republic) [8781-18]

Poster Session

Meridian HallWed 17:40 to 19:15

Conference attendees are invited to attend the Poster Session on Wednesday afternoon. Come view the posters, enjoy light refreshments, ask questions, and network with colleagues in your field. Authors of poster papers will be present to answer questions concerning their papers. Attendees are required to wear their conference registration badges to the poster sessions. Poster authors, view poster presentation guidelines and set-up instructions on page 5, and at <http://spie.org/x30951.xml>.

Almost lossless multiple crossing of silicon wires by means of vertical coupling with a polymer strip waveguide, Andrey Tsarev, Eugeny Kolosovsky, A.V. Rzhanov Institute of Semiconductor Physics (Russian Federation) . . [8781-37]

Recent progress in opto-mechanical design developed for the OSQAR experiment, Karolina Macúchová, Jan Hosek, Sárka Nemcova, Czech Technical Univ. in Prague (Czech Republic); Miroslav Sulc, Technical Univ. of Liberec (Czech Republic); Josef Zicha, Czech Technical Univ in Prague (Czech Republic) [8781-38]

Accurate determination of initial value of theoretical evaluation of rare earth doped fiber lasers with high reflectance, Fatemeh Kazemizadeh, Tarbiat Modares Univ. (Iran, Islamic Republic of); Fatemeh Shahshahani, Alzahra Univ. (Iran, Islamic Republic of) [8781-39]

Near-infrared elastic light scattering by a silicon microsphere, Ulas S. Gokay, Ali Serpengüzel, Koç Univ. (Turkey) [8781-40]

Determination of amplifying parameters of LMA Yb:silica fiber amplifier, Maryam Ilchi-Ghazaani, Parviz Parvin, Sajjad Mohammadian, Amirkabir Univ. of Technology (Iran, Islamic Republic of) [8781-41]

Fabrication and evaluation of chalcogenide glass molding lens for car night-vision system, Du Hwan Cha, Korea Photonics Technology Institute (Korea, Republic of) [8781-42]

Modeling of CW Yb-doped silica fiber laser by considering loss mechanism, Maryam Ilchi-Ghazaani, Parviz Parvin, Amirkabir Univ. of Technology (Iran, Islamic Republic of) [8781-43]

Comparison between various techniques for power scaling of fiber laser output, Maryam Ilchi-Ghazaani, Parviz Parvin, Vajilheh Daneshafrooz, Amirkabir Univ. of Technology (Iran, Islamic Republic of) [8781-44]

Astronomical optical frequency comb generation with silicon nitride micro ring-resonators, Tino Fremberg, Leibniz-Institut für Astrophysik Potsdam (Germany) [8781-45]

Numerical investigation of propagation constant in silicon nitride waveguides with different refractive index profiles, Daniel Bodenmüller, Leibniz-Institut für Astrophysik Potsdam (Germany) [8781-46]

Optical characterization of the aperiodic multilayered anisotropic structure based on Kolakoski sequence, Volodymyr I. Fesenko, Institute of Radio Astronomy of NASU (Ukraine) and Kharkov National Univ. of Radio Electronics (Ukraine); Igor A. Sukhoivanov, Univ. de Guanajuato (Mexico) [8781-47]

Superprism effect close to the Bragg condition: a theory that maximizes the effect, Vito Mocella, Pierfelice Ciancia, Istituto per la Microelettronica e Microsistemi (Italy); Giuseppe Cocorullo, Univ. della Calabria (Italy); Ivo Rendina, Istituto per la Microelettronica e Microsistemi (Italy) [8781-48]

Dot distribution type of grayscale photomask and colorscale photomask for fabrication diffractive and refractive microlens, Qingle Tang, Huazhong Institute of Electro-Optics (China) [8781-49]

Performance comparison between 33RZ-POMUX-DQPSK and 33RZ-DC-DQPSK using coherent detection for 1.6 Tb/s WDM transmission over 1200 km, Abir Hraghi, Univ. of Carthage (Tunisia) and National Engineering School of Communication of Tunis (Tunisia); Mourad Menif, Univ. of Carthage (Tunisia) and National Engineering School of Communication of Tunis (Tunisia) and SUP'COM (Tunisia) [8781-50]

Thursday 18 April

Session 5

Room: Nadir Thu 8:30 to 10:20

Integrated Photonics Design II

Session Chair: Iñigo Molina-Fernandez, Univ. de Málaga (Spain)

8:30: **A fresh look at integrated optical isolation and Lorentz reciprocity** (*Invited Paper*), Mathias Vanwolleghem, Institut d'Électronique Fondamentale (France) and Ctr. National de la Recherche Scientifique (France) [8781-19]

9:00: **Ultra-long, ultra-high quality fibre Bragg gratings**, Raman Kashyap, Mathieu Gagné, Ecole Polytechnique de Montréal (Canada) [8781-20]

9:20: **New insight in guided resonances with negative refracting photonic crystals**, Silvia Romano, Consiglio Nazionale delle Ricerche (Italy); Vito Mocella, Istituto per la Microelettronica e Microsistemi (Italy); Stefano Cabrini, The Molecular Foundry (United States); Ivo Rendina, Istituto per la Microelettronica e Microsistemi (Italy) [8781-21]

9:40: **Dispersion optimization of slow light in slotted photonic crystal waveguide by selective air holes infiltration**, Ya-Nan Zhang, Yong Zhao, Qi Wang, Northeastern Univ. (China) [8781-22]

10:00: **A parallel computational FDTD approach to the analysis of the light scattering from an opal photonic crystal**, Alessandro Vaccari, Antonino Cala' Lesina, Fondazione Bruno Kessler (Italy); Luca Cristoforetti, Provincia Autonoma di Trento (Italy); Andrea Chiappini, Consiglio Nazionale Delle Ricerche (Italy); Francesco Prudeniano, Politecnico di Bari (Italy); Alessandro Bozzoli, Fondazione Bruno Kessler (Italy); Maurizio Ferrari, Istituto di Fotonica e Nanotecnologie (Italy) [8781-23]

Coffee Break. Thu 10:20 to 10:50

Session 6

Room: Nadir Thu 10:50 to 12:40

Plasmonics

Session Chair: Romain Brenot, III-V Lab. (France)

10:50: **Low-power nanophotonics: material and device technology** (*Invited Paper*), Lars Thylén, Royal Institute of Technology (Sweden) and Hewlett-Packard Labs. (United States); Lech Wosinski, Petter Holmstrom, Sebastian Lourduos, Royal Institute of Technology (Sweden) [8781-24]

11:20: **Energy-per-bit limits in plasmonic integrated photodetectors**, Pierre Wahl, Vrije Univ. Brussel (Belgium); Takuo Tanemura, The Univ. of Tokyo (Japan); Christof Debaes, Nathalie Vermeulen, Jürgen Van Erps, Vrije Univ. Brussel (Belgium); David A. B. Miller, Stanford Univ. (United States); Hugo Thienpont, Vrije Univ. Brussel (Belgium) [8781-25]

11:40: **Analysis of novel plasmonic guiding nanostructures with Fourier modal methods**, Pavel Kwiecien, Ivan Richter, Czech Technical Univ. in Prague (Czech Republic); Jiri Ctyroky, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic) [8781-26]

12:00: **Simplification of plasmonic lenses design based on wave interferences method**, Quentin Levesque, Patrick Bouchon, ONERA (France); Fabrice Pardo, Lab. de Photonique et de Nanostructures (France); Riad Haïdar, ONERA (France); Jean-Luc Pelouard, Lab. de Photonique et de Nanostructures (France) . . [8781-27]

12:20: **Resonance effects in the optical antennas shaped as finite comb-like gratings of noble-metal nanostrips**, Olga V. Shapoval, Institute of Radio-Physics and Electronics (Ukraine) and National Academy of Sciences of Ukraine (Ukraine); Jiří tyroky?, Institute of Photonics and Electronics of the ASCR, v.v.i. (Czech Republic); Alexander I. Nosich, Institute of Radio-Physics and Electronics (Ukraine) and National Academy of Sciences of Ukraine (Ukraine) [8781-28]

Lunch Break Thu 12:40 to 14:00

Session 7**Room: Nadir** **Thu 14:00 to 15:20****Novel Materials and Biosensing**Session Chair: **Lars Thylén**, Royal Institute of Technology (Sweden)

14:00: **Group IV platforms for the mid-infrared** (*Invited Paper*), Goran Z. Mashanovich, Milos Nedeljkovic, Xia Chen, Taha M. Ben Masaud, Univ. of Southampton (United Kingdom); Muhammad Muneeb, Univ. Gent (Belgium); Michael Strain, Marc Sorel, Univ. of Glasgow (United Kingdom); Thomas F. Krauss, The Univ. of York (United Kingdom); Gunther C. Roelkens, Univ. Gent (Belgium); Anna C. Peacock, Harold M. H. Chong, Graham T. Reed, Univ. of Southampton (United Kingdom). [8781-29]

14:30: **Silicon nitride back-end optics for biosensor applications** (*Invited Paper*), Sebastián Romero-García, Florian Merget, Jeremy Witzens, RWTH Aachen (Germany); Frank C. Zhong, Hod Finkelstein, Illumina, Inc. (United States) [8781-30]

15:00: **Hybrid plasmonic microdisk resonators for interconnect applications**, Fei Lou, Royal Institute of Technology (Sweden); Lars Thylén, Royal Institute of Technology (Sweden) and Joint Research Ctr. of Photonics (China) and Hewlett-Packard Labs. (United States); Lech Wosinski, Royal Institute of Technology (Sweden) and Joint Research Ctr. of Photonics (China) [8781-51]

Coffee Break 15:20 to 15:50

Session 8**Room: Nadir** **Thu 15:50 to 17:20****Integrated Photonic Design III**Session Chair: **Inigo Molina-Fernandez**, Univ. de Málaga (Spain)

15:50: **Ge/SiGe quantum well optical modulator** (*Invited Paper*), Delphine Marris-Morini, Papichaya Chaisakul, Mohamed-Saïd Rouifed, Institut d'Électronique Fondamentale (France); Jacopo Frigerio, Politecnico di Milano (Italy); Giovanni Isella, Lab. for Epitaxial Nanostructures on Silicon and Spintronics (Italy); Daniel Chrastina, Politecnico di Milano (Italy); Xavier Le Roux, Samson Edmond, Jean-René Coudevylle, Laurent Vivien, Institut d'Électronique Fondamentale (France) [8781-32]

16:20: **Multi-scale simulation of an optical device using a novel approach for combining ray-tracing and FDTD**, Claude Leiner, Susanne Schweitzer, Volker Schmidt, Maria Belegatis, Franz-Peter Wenzl, Paul Hartmann, JOANNEUM RESEARCH Forschungsgesellschaft mbH (Austria); Ulrich Hohenester, Karl-Franzens-Univ. Graz (Austria); Christian Sommer, JOANNEUM RESEARCH Forschungsgesellschaft mbH (Austria) [8781-33]

16:40: **Adapted perfectly matched layers (PML) for diffraction gratings and their quasi-modal analysis**, Benjamin Vial, Institut Fresnel (France); Frédéric Zolla, André Nicolet, Univ. d'Aix-Marseille (France); Mireille Commandré, Institut Fresnel (France); Stéphane Tisserand, Silios Technologies (France). [8781-34]

17:00: **Superfocusing and mirror transformation of airy pulses under the action of third order dispersion**, Rodislav Driben, Tel Aviv Univ. (Israel) and Univ. Paderborn (Germany); Yi Hu, Institut National de la Recherche Scientifique (Canada); Zhigang Chen, San Francisco State Univ. (United States); Boris A. Malomed, Tel Aviv Univ. (Israel); Roberto Morandotti, Institut National de la Recherche Scientifique (Canada) [8781-35]

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

A

- Aaronson, Scott [8773-30] S5
Abdul Rahman, Muhammad Ghazali [8774-15] S2
Abdul Rashid, Hairul Azhar [8775-29] S6, [8775-30] SPS
Abdullah, Mohd Nizam [8772-60] SPS
Abela, Rafael [8778-49] SPS
Abell, Andrew D. [8774-3] S1
Abell, Dan T. [8779-36] S8
Abicht, Florian [8779-30] S7
Abir, Hraghi [8781-50] SPS
Abu-Azoum, Salima [8779-43] SPS
Accard, Alain [8781-12] S3
Acebal González, Pablo [8776-23] S5, [8776-26] S6, [8780-75] SPS
Adam, Jean-Luc 8775 Program Committee, [8775-2] S1
Adolph, Marcus [8777-18] S5
Agnesi, Antonio [8772-35] S8
Ahmad Bazi, Abdul Kadir [8775-30] SPS
Ahmad, Fathinul Fikri [8775-30] SPS
Ahn, Su Chang [8771-49] SPS, [8776-27] S6
Aimierding, Aimidula [8779-35] S8
Aizpurua, Javier 8772 Program Committee, 8772 S4 Session Chair, 8772 S5 Session Chair, [8772-13] S3
Akbas, Yunus E. [8773-17] S4
Al Rashed, Anwar [8773-43] S7
Alaimo, Matteo David D [8778-17] S3
Alajerami, Yasser [8772-41] S9
Albach, Daniel [8780-4] S1
Albert, Felicie [8779-66] S15
Aldossary, Omar M. [8773-43] S7
Aleksandrova, Irina V. [WS100-32] S5
Aleonard, Marie-Madeleine [8779-62] S13
Alessi, David [8779-66] S15
Alexander, Neil B. [WS100-27] S5, [WS100-39] SPS
Alió, Jorge L. [8776-26] S6
Al-Janabi, A. Hadi [8775-23] S5
Allan, Peter M. [8780-1] S1
Alles, Aldo B. [8774-34] SPS
Allinger, Klaus [8779-56] S11
Almeida, Juliana Mara P. [8776-24] S6
Almeida, Vania [8774-30] S6
Alnaimi, Radhwan [8777-30] SPS
Alonso Ramos, Carlos A. [8781-7] S2
Altucci, Carlo [8774-19] S3
Alvarado-Méndez, Edgar [8772-16] S4
Alvarez Ruiz, Jesús [WS100-26] S5, [WS100-28] S5, [WS100-33] S5
Alvarez-Puebla, Ramon A. [8771-32] S7
Alves, Eduardo P. [8771-53] SPS
Ambrosio, Antonio [8774-19] S3
Amiranoff, François WS100 Conference Chair
Anania, Maria Pia [8779-46] SPS
Andersen, Ulrik L. 8773 Program Committee
Andò, Lucio [8779-37] SPS
André, Jean-Michel [8777-17] S5, [8777-50] S13
Andreassi, Maria Grazia [8779-23] S6
Andreasson, Jakob [8777-18] S5, [8777-29] SPS
Andreev, Alexander [8779-29] S7
Andreev, Alexander [8779-30] S7
Andreev, Yury [8772-55] SPS, [8772-57] SPS, [8772-64] SPS
Angelovski, Aleksandar [8778-20] S4
Angervaks, Alexandr E. [8776-3] S1
Antolín Urbaneja, Juan Carlos [8774-56] SPS
Antonelli, Luca [WS100-22] S4, [WS100-37] SPS, [WS100-41] SPS
Antonoli, Sebastiano [8773-12] S3, [8773-2] S1
Antos, Roman [8771-54] SPS
Anuskiewicz, Alicja [8775-14] S4, [8775-25] S6
Aparicio Lopez, Márcio André Prieto [8780-26] S7
Apostolova, Tzveta T. [WS100-29] S5
Aquila, Andrew [8777-16] S4, [8777-29] SPS
Arakelian, Sergei M. [8772-17] S4, [8772-21] S5
Arber, Tony D. [8780-64] S14
Arens, Sven [8780-71] S14
Argiolas, Nicola [8772-18] S5
Ariffin, Alawiah [8775-29] S6
Armelles, Gaspar [8771-22] S5
Arnold, William H. Meeting VIP
Aruev, Pavel [8777-27] SPS
Asakawa, Kiyoshi 8772 Program Committee
Asano, Koji [8772-49] SPS
Assmann, Walter [8779-56] S11
Atkins, Carolyn 8777 S11 Session Chair, [8777-31] S10
Atuchin, Victor V. [8771-39] SPS, [8771-41] SPS, [8771-50] SPS, [8772-56] SPS, [8772-62] SPS, [8772-64] SPS, [8772-65] SPS, [8774-61] SPS
Atzeni, Stefano [WS100-10] S3, [WS100-11] S3, [WS100-9] S3
Aubrecht, Ivo [8776-10] S3
Aubrecht, Jan [8774-43] SPS, [8775-7] S2, [8775-8] S2
Auchère, Frédéric [8777-47] S13
Auriemma, Finizia [8771-33] S7, [8774-10] S2, [8774-37] SPS
Avdikos, Georgios K. [8780-25] S7
Awietjan, Stefan [8774-4] S1
Aznárez Candao, José Antonio [8777-48] S13, [8777-49] S13
- ## B
- Badziak, Jan [WS100-22] S4, [WS100-23] S4, [WS100-37] SPS
Bae, Sukang [8772-35] S8
Baets, Roel G. Meeting VIP, 8781 Program Committee
Baffigi, Federica [8779-20] S5, [8779-23] S6, [8779-40] SPS, [WS100-37] SPS
Bai, Yuhong [8777-50] S13
Baili, Amira [8772-12] S2
Bajt, Saša 8777 Conference Chair, [8777-20] S6, [8777-29] SPS, [8778-32] S6
Baker, Sherry L. [8777-1] S1
Bakopoulos, Paraskevas [8780-25] S7
Bakule, Pavel [8780-74] S15, [8780-77] S15, [8780-82] S15
Bakut, Peter Alexseevich [8773-19] SPS
Baldini, Francesco 8774 Conference Chair, 8774 S1
Session Chair, 8774 S3
Session Chair, [8774-22] S4, [8774-23] S4
Balembois, François [8780-25] S7
Balik, Zdenek [8774-58] SPS
Ballato, John 8775 Program Committee
Balogh, Emeric [8780-59] S12
Balolipetskiy, Aleksander A. [WS100-32] S5
Bananej, Alireza [8780-29] SPS
Banas, Agnieszka [8771-11] S3
Banerjee, Saumyabrata [8780-5] S2, [WS100-4] S2
Bang, Ole 8775 Program Committee
Bar, Jan [8773-22] SPS
Barbas, Alfonso [8772-23] S6
Barbera, Marco [8777-36] S10
Bardou, Nathalie [8771-12] S3
Bargheer, Matias [8778-34] S6
Barinov, Igor [8772-17] S4
Barkusky, Frank [8777-4] S2
Barnakov, Yuri A. [8771-25] S6
Bartelt, Hartmut [8774-5] S1, [8774-65] SPS, 8775 Program Committee
Barthelmess, Miriam [8778-32] S6
Bartnik, Andrzej S. 8777 S10
Session Chair, [8777-44] S12, [8777-53] S14, [8777-7] S2
Barty, Anton [8777-29] SPS
Barucci, Andrea [8774-22] S4
Base, T. [8780-77] S15
Basta, Giuseppina [8779-23] S6
Batani, Dimitri D. [WS100-18] S4, [WS100-22] S4, [WS100-24] S4, [WS100-37] SPS, [WS100-41] SPS, [WS100-42] S4
Baton, Sophie D. [WS100-24] S4, [WS100-42] S4
Batysta, František [8780-74] S15, [8780-77] S15
Bauk, Sabar [8775-29] S6
Bauke, Heiko [8780-71] S14
Baumann, Michael [8779-54] S11
Bayramian, Andy J. 8780 Program Committee
Bazarov, Bair G. [8771-50] SPS, [8772-62] SPS
Bazarova, Zhibzema G. [8771-50] SPS, [8772-62] SPS
Bean, Richard [8777-29] SPS
Beaucourt, C. [WS100-42] S4
Beaudoin, Normand [8772-50] SPS
Bedajankova, Anna [8774-33] SPS
Beg, Farhat N. [WS100-24] S4, [WS100-42] S4
Beisel, Nina [8772-65] SPS
Bekenev, V. L. [8772-56] SPS
Belardini, Alessandro [8771-35] S8, [8772-18] S5, [8772-2] S1
Belegreatis, Maria [8781-33] S8
Belle, Stefan [8774-62] SPS
Bellini, Marco 8773 Program Committee
Bellisai, Simone [8773-3] S1
Ben Masaud, Taha M. [8781-29] S7
Ben Salem, Amine [8775-4] S1
Bencivenga, Filippo [8778-32] S6, [8778-6] S2
Benedetti, Carlo [8779-7] S2
Benedikovic, Daniel [8772-28] S7
Benediktovitch, Andrei [8777-13] S3, [8778-41] SPS
Benisty, Henri [8774-47] SPS, [8781-11] S3, [8781-12] S3
Benson, Trevor Mark 8781 Program Committee
Bente, Erwin A. [8781-13] S3
Bergh, Magnus [8777-18] S5
Berghmans, Francis [8775-24] S6
Bergonzo, Aurelien 8775 Program Committee
Berini, Pierre 8771 S2 Session Chair, [8771-24] S6
Berneth, Horst [8776-2] S1
Bertolotti, Mario 8772 Conference Chair, 8772 S1 Session Chair, 8772 S6 Session Chair, 8772 S9 Session Chair
Bertucci, Alessandro [8775-1] S1
Bertuccio, Giuseppe [8779-31] S7
Besbes, Mondher [8781-11] S3, [8781-12] S3
Betin, Aleksander [8776-28] SPS
Bett, Thomas H. [8780-1] S1
Bettioli, Andrew A. [8771-11] S3
Beveridge, Nicola L. [WS100-6] S2
Beyreuther, Elke [8779-54] S11
Bezyaychnaya, Tatiana V. [8780-19] S5
Bianco, Laura [8778-30] S6
Bijkerk, Fred 8777 Program Committee, [8777-10] S3, [8777-15] S4, [8778-13] S3
Bin, Jianhui [8779-56] S11
Bingham, Robert [WS100-34] S3
Bionta, Mina R. [8778-22] S5, [8778-27] S6
Bizzarri, Ranieri [8779-23] S6
Blaise, Sylvain [8771-4] S1
Blakeney, Joel [8779-39] SPS
Blanchot, Nathalie [WS100-42] S4
Blaya, Salvador [8776-23] S5, [8780-75] SPS
Blazej, Josef 8773 Program Committee, 8773 S1 Session Chair, [8773-21] SPS, [8773-7] S2, [8773-8] S2
Blum, Loïc J. 8774 Program Committee
Bobashev, Sergei V. [8777-54] S14
Bobrinev, Vladimir [8776-28] SPS
Bobusky, Volodymyr [8775-18] S4
Bock, Przemek J. [8781-6] S2
Bödefeld, Ragnar [8780-17] S5
Bodenmüller, Daniel [8772-27] S7, [8781-46] SPS
Bódi, Balázs [8780-59] S12
Boella, Elisabetta [8779-10] S3, [8779-44] SPS
Bogaerts, Wim [8781-1] S1
Bogdanovich, Maxim V. [8780-19] S5
Bolotnikov, Aleksey E. [8773-10] S3, [8773-11] S3
Bolton, Paul R. 8779 Conference CoChair, 8779 S12 Session Chair, [8779-57] S12
Bonavolonta, Carmela [8773-15] S4, [8773-17] S4
Bonfigt, S. [8778-44] SPS
Bonifazi, Giuseppe [8774-59] SPS, [8774-60] SPS
Bonlie, Jim D. [WS100-24] S4
Bonneau, Damien [8781-36] S1
Bonner, Carl E. [8771-25] S6
Bonnet, Thomas [8779-62] S13
Bonora, Stefano [8778-11] S3, [8780-37] SPS
Booth, Nicola [8779-11] S3, [WS100-12] S3
Borghesi, Marco [8779-52] S10, [8779-58] S12, [8779-63] S12

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Borghini, Andrea [8779-23] S6
Borisenko, Lidia [WS100-40] SPS
Borisenko, Nataliya G. [WS100-40] SPS
Borysiewicz, Michal [8773-22] SPS
Borysiuk, Jolanta [8771-26] S6
Bosgra, Jeroen [8777-10] S3, [8778-13] S3
Bostedt, Christoph [8777-18] S5
Boucher, Guillaume [8773-35] S6
Bouchon, Patrick [8771-9] S2, [8781-27] S6
Boudrioua, Azzedine [8772-8] S2
Bougeard, Michel [8779-20] S5
Bougot-Robin, Kristelle [8774-47] SPS
Boukios, Stavros [8780-25] S7
Bourdet, Gilbert L. [8780-13] S4
Boussard-Plédel, Catherine [8775-2] S1
Boutet, Sebastien [8777-1] S1
Bowering, Norbert R. [8777-25] S7
Boyle, Alexis [8780-2] S1, [8780-76] S15
Bozzoli, Alessandro [8781-23] S5
Bradley, David [8775-29] S6
Brady, Chris [8779-11] S3, [8780-64] S14
Braenzel, Julia [8779-30] S7
Brantov, Andrey [8779-42] SPS
Braun, Stefan [8778-51] SPS
Braune, Markus [8778-42] SPS, [8778-44] SPS
Breede, Heiko [8778-47] SPS
Breese, Mark [8771-11] S3

Breil, Jerome [WS100-15] S3
Brenchi, Massimo [8774-23] S4
Brenner, Guenter [8778-40] SPS, [8778-42] SPS, [8778-44] SPS
Brenot, Romain 8781 S6 Session Chair, [8781-10] S3
Brida, Giorgio [8773-34] S6
Brilland, Laurent [8775-2] S1
Briz, Nerea [8774-56] SPS
Broderick, Neil G. R. 8775 Program Committee
Broemmel, Dirk [8779-75] S19
Bronzi, Danilo [8773-3] S1
Brooks, Audrey D. [8777-42] S12
Broome, Matthew A. [8773-30] S5
Bruder, Friedrich-Karl [8776-2] S1
Brunetti, Enrico [8779-76] S19
Bruno, Terry [8780-21] S6
Brusatin, Giovanna [8778-11] S3
Brynda, Eduard 8774 Program Committee, 8774 S4 Session Chair, [8774-18] S3, [8774-33] SPS, [8774-34] SPS
Brzhezinskaya, Maria [8777-55] S15
Buck, Jens [8778-24] S5, [8778-28] S6
Buczynski, Ryszard R. [8775-33] SPS
Budaszewski, Daniel [8774-4] S1
Budner, Boguslaw [8777-7] S2
Bulanov, Sergei 8779 Program Committee, [8779-14] S4,

[8779-63] S12, 8780 Program Committee, 8780 S14 Session Chair, 8780 S16 Session Chair, [8780-51] S11
Bulanov, Stepan S. [8779-63] S12
Bulanovs, Andrejs [8776-12] SPS
Bulgarini, Gabriele [8773-16] S4
Buono, Daniela [8773-33] S5
Bureau, Heiko [8780-53] S11
Bureau, Bruno [8775-2] S1
Burian, Tomáš [8777-11] S3, [8777-15] S4, [8777-16] S4, [8777-20] S6, [8777-23] S7
Burokur, Shah Nawaz [8771-12] S3
Burton, David A. 8779 S16 Session Chair, [8779-74] S18
Burza, Matthias [WS100-12] S3
Busch, Kurt [8771-15] S4
Busenbergs, J. [8772-59] SPS
Bussmann, Michael [8779-13] S3, [8779-19] S5, [8779-53] S11, [8780-53] S11, [8780-69] S14
Bussolino, GianCarlo [8779-45] SPS
Bychenkov, Valery [8779-42] SPS

Calegari, Francesca [8778-38] SPS
Caliò, Alessandro [8774-53] SPS
Calvo Padilla, Maria L. [8781-6] S2
Camarda, Giuseppe S. [8773-10] S3, [8773-11] S3
Cammarata, Marco [8778-22] S5, [8778-27] S6
Camy, Patrice [8780-10] S3
Candiani, Alessandro [8775-1] S1
Candiano, Giuliana [8779-23] S6
Cann, Nicholas [8780-1] S1
Capdessus, Remi RC [8780-56] S11, [8780-87] S14
Capobianco, Gerardo [8777-48] S13
Capotondi, Flavio [8778-32] S6, [8778-40] SPS
Capretti, Antonio [8771-33] S7
Capriglione, Paola [8774-9] S2
Caputo, Domenico [8774-31] S7, [8774-32] S7
Carapella, Giovanni [8771-51] SPS
Carbone, Beatrice [8773-1] S1
Cardenas, Ana M. [8781-16] S4
Cardinali, Vanessa [8780-13] S4
Cardoso, João M. R. [8774-30] S6
Carlino, Vincent L. [8777-24] S7
Carpinelli, Massimo [8779-63] S12
Carpintero, Guillermo [8781-13] S3
Carretero López, Luis [8776-23] S5, [8776-26] S6, [8780-75] SPS
Carroll, David C. [8779-11] S3, [WS100-12] S3
Casarino, Carlo [8779-23] S6

C

Cabrini, Stefano [8781-21] S5
Cairns, Robert A. [WS100-34] S3
Cajzl, Jakub [8775-8] S2
Cala' Lesina, Antonino [8781-23] S5

 the business of photonics
optics.org

view it all in
a different light

for the latest news, analysis,
market intelligence and insight direct
to your desktop or mobile device

sign up to our html newsletter
simply go to optics.org/register



sign up today
to receive our free weekly
html newsletter

2 Alexandra Gate, Ffordd Pengam, Cardiff CF24 2SA, United Kingdom
Tel: +44 (0)117 905 5330 Fax: +44 (0)117 905 5331

SPIE

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

- Cash, Webster 8777 Program Committee, [8777-32] S10
Casner, Alexis [WS100-42] S4
Caspani, Lucia [8781-15] S4
Castañeda, Juan A. [8781-16] S4
Castaño-Meneses, Victor M. [8772-16] S4
Cavaco, Jeffrey L. [8777-42] S12, [8780-21] S6
Cavallaro, Salvatore [8779-37] SPS
Cebollada, Alfonso [8771-22] S5
Ceccotti, Tiberio [8779-20] S5, [WS100-42] S4
Cennamo, Giovanni [8774-9] S2
Cerededa, David [WS100-26] S5
Cerf, Nicolas J. 8773 Program Committee
Cerna, Daniela [8777-32] S10, [8777-43] S12
Cescato, Lucila H. D. [8776-19] S5, [8776-24] S6
Cha, Du Hwan [8781-42] SPS
Cha, H. J. [8780-88] S16
Chadt, Karel [8774-14] S2
Chah, Karima [8775-24] S6
Chaisakul, Papichaya [8781-32] S8
Chaltykian, Vigen O. [8772-61] SPS
Chalupský, Jaromír 8777 S2
Session Chair, [8777-15] S4, [8777-16] S4, [8777-20] S6, [8777-23] S7
Chang, Hung-Chun 8781 Program Committee
Chanteloup, Jean-Christophe Francis 8780 Program Committee, [WS100-3] S2
Chapman, Henry N. [8777-20] S6, [8777-29] SPS, [8778-32] S6
Chauvet, Mathieu [8772-19] S5
Chavez Boggio, Jose Manuel [8772-27] S7, [8775-11] S3
Chawla, Sugreev [WS100-24] S4
Cheben, Pavel 8781 Conference Chair, [8781-6] S2, [8781-7] S2, [8781-9] S2
Chembo, Yanne K. [8772-24] S6
Chen, Che Chin [8771-43] SPS
Chen, Liming [8779-65] S15
Chen, Meixiong [8771-55] SPS
Chen, Min [8779-7] S2
Chen, Szu-Yuan [8779-5] S1
Chen, Wei-Hsin [8779-5] S1
Chen, Xia [8781-29] S7
Chen, Yung Jui [8781-8] S2
Chen, Zhigang [8781-35] S8
Chen, Zhuo Ren [8772-10] S2
Cheng, Yu Chieh [8771-34] S8
Cherif, Rim [8772-12] S2, [8775-4] S1
Cherkouk, Charaf A. [8774-25] S5
Chevalier, Paul [8771-9] S2
Chiappini, Andrea [8781-23] S5
Chiavaioli, Francesco [8774-23] S4
Chimier, Benoit [8777-21] S7
Chimitova, O.D. [8771-50] SPS
Chiu, S. K. [8774-38] SPS
Chmelík, Radim 8776 Program Committee
Chodukowski, Tomasz [WS100-22] S4, [WS100-37] SPS
Choi, Duk-Yong [8772-6] S2
Choi, Il Woo [8779-12] S3, [8780-85] S16
Choi, Seong Soo [8772-34] S8
Chollet, Matthieu [8778-22] S5, [8778-27] S6
Chong, Harold M. H. [8781-29] S7
Choukourov, Andrei [8777-22] S7, [8777-6] S2
Chrastina, Daniel [8781-32] S8
Christodoulides, Paul [8775-21] S5
Chu, Hsu-Hsin [8779-5] S1
Chu, Sai-Tak [8781-15] S4
Chung, U-Chan [8771-21] S5
Chvykov, Vladimir V. [8779-22] S5
Chyla, Michal [8780-9] S3
Ciancia, Pierfelice [8781-48] SPS
Ciancio, Regina [8771-51] SPS
Cimino, Roberto 8778 Program Committee
Cinquegrana, Paolo [8778-25] S5
Ciocarlan, Cristian [8779-43] SPS
Ciofini, Marco [8780-18] S5
Cipiccia, Silvia [8779-76] S19
Cipriani, Dalibor [8774-50] SPS
Cirrone, G. A. P. [8779-63] S12
Clady, Raphael G. C. R. [8780-16] S4
Clarke, Robert J. [8779-11] S3, [8779-50] S10, [8780-2] S1, [8780-76] S15
Clayton, Christopher E. [8779-66] S15
Clerici, Matteo [8781-15] S4
Clet, Vincent [8780-10] S3
Cocco, Daniele [8778-40] SPS
Cocorullo, Giuseppe [8781-48] SPS
Coffa, Salvatore [8773-1] S1
Coffee, Ryan N. [8778-22] S5, [8778-27] S6
Coillet, Aurélien [8772-24] S6
Cojocar, Crina Maria [8771-34] S8
Collette, Marc [8772-50] SPS
Collier, John L. [8780-2] S1, [8780-5] S2, [8780-76] S15, [8780-78] S15, [WS100-4] S2
Collin, Stéphane [8771-12] S3
Collombet, Francis [8775-24] S6
Comet, Maxime [8779-62] S13
Consales, Marco [8774-1] S1
Consoli, Fabrizio [WS100-37] SPS
Constant, Eric [8780-11] S3
Coppola, Nicola [8777-20] S6
Corde, Sebastien [8779-6] S2
Coreno, Marcello [8778-31] S6
Cormier-Michel, Estelle [8779-41] SPS
Cornejo-Monroy, Delfino [8772-16] S4
Corradi, Antonio [8781-13] S3
Corradini, Roberto [8775-1] S1
Correia, Carlos Manuel B. A. [8774-30] S6
Coscelli, Enrico [8775-23] S5
Cosi, Franco [8774-22] S4
Cotelo, Manuel [8772-23] S6
Coudeville, Jean-René [8781-32] S8
Coudreau, Thomas [8773-35] S6
Courjaud, Antoine [8780-10] S3
Coury, Mireille [WS100-24] S4
Cowan, Benjamin [8779-36] S8, [8779-41] SPS
Cowan, Thomas E. 8779 Program Committee, [8779-13] S3, [8779-19] S5, [8779-54] S11, [8780-53] S11
Crescenzo, Giuseppe [8777-48] S13
Crescitelli, Alessio [8774-1] S1, [8774-69] SPS
Cristiano, Roberto [8773-15] S4, [8773-17] S4
Cristoforetti, Gabriele [WS100-37] SPS
Cristoforetti, Luca [8781-23] S5
Crockett, Robert K. [8779-36] S8
Cros, Brigitte 8779 S2 Session Chair, [8779-2] S1
Crosignani, Bruno 8772 Program Committee
Crouzeix, Laurent [8775-24] S6
Ctyroký, Jiri 8771 Program Committee, [8771-56] SPS, 8781 Conference Chair, 8781 S1 Session Chair, [8781-26] S6, [8781-28] S6, [8781-9] S2
Cubik, Jakub [8774-41] SPS, [8774-54] SPS
Cuccato, Andrea [8773-12] S3, [8773-2] S1
Cucinotta, Annamaria [8775-1] S1, [8775-23] S5
Cui, Shuo [8775-2] S1
Cui, Yonggang [8773-10] S3, [8773-11] S3
Cusano, Andrea [8774-1] S1, [8774-27] S5, [8774-69] SPS
Cutolo, Antonello [8774-1] S1
Cutroneo, Mariapompea [8779-37] SPS
Cuttone, G. [8779-63] S12
Czerwinski, Andrzej [8773-22] SPS
Czwalinna, Marie K. [8778-20] S4, [8778-26] S5
-
- D**
- Dado, Milan [8772-28] S7
D'Agostini, Maurizio [8774-59] SPS
Dalla Betta, Gian-Franco [8773-4] S1
Dall'Ava, Alberto [8774-59] SPS
D'Ambrosio, Vincenzo [8773-31] S5
Danailov, Miltcho B. [8778-25] S5, [8778-32] S6
Danilov, Leonid V. [8781-18] S4
Danson, Colin N. [8780-1] S1
Dantala, Dinakar [8774-49] SPS
Dardano, Principia [8771-14] S3, [8771-52] SPS
Dastjani Farahani, Shafagh [8777-15] S4, [8777-20] S6
D'Auria, Sabato [8774-56] SPS
Davies, Jonathan R. [WS100-24] S4
Davis, Jack [8779-22] S5
Davis, Stanley P. [8780-87] S14
Davoodi, Mahdi [8772-5] S1
De Angelis, Riccardo [WS100-37] SPS
de Avila, Luis Fernando [8776-19] S5, [8776-24] S6
de Cesare, Giampiero [8774-31] S7, [8774-32] S7
de Dood, Michiel J. A. [8773-37] S6
de Gaufridy, François [8772-23] S6
De Geronimo, Gianluigi [8773-11] S3
De La Rue, Richard M. [8771-47] SPS, [8774-15] S2
de la Varga, Alberto G. [8772-23] S6
de Lisio, Corrado [8773-15] S4, [8773-17] S4
de los Santos Pereira, Andrés [8774-18] S3, [8774-33] SPS, [8774-34] SPS
De Luca, Anna Chiara [8771-14] S3
de Lustrac, André [8771-12] S3, [8771-13] S3, [8771-4] S1
De Martino, Giuseppe [8771-52] SPS
De Ninno, Giovanni [8778-1] S1
De Ponte, Daniel P. [8777-29] SPS
De Rosa, Claudio [8771-33] S7, [8774-10] S2, [8774-37] SPS
de Rossi, Sébastien [8777-47] S13
De Sá Barros, Rui Nuno Almeida [8780-80] S15
de Schoutheete, T. [8774-2] S1
de Sousa, Nuno [8771-22] S5
De Stefano, Luca [8774-53] SPS
De Tommasi, Edoardo [8771-14] S3
Deana, Alessandro M. [8780-26] S7
Debaes, Christof [8781-25] S6
Debayle, Arnaud [WS100-24] S4, [WS100-42] S4
Debus, Alexander [8779-19] S5, [8780-53] S11
Degiovanni, Ivo Pietro [8773-34] S6
Degiron, Aloyse [8771-13] S3
Del Prete, Antonio [8774-9] S2
del Rio, Emma [WS100-26] S5
Delâge, André [8781-6] S2
Della Frera, Adriano [8773-34] S6
Della Giustina, Gioia [8778-11] S3
Della Ventura, Bartolomeo [8774-19] S3
Delmotte, Franck [8777-46] S13, [8777-47] S13
Demchenko, Nikolai N. [WS100-22] S4
Demidovich, Alexander A. [8778-25] S5
Deneuille, François [8777-21] S7
Deng, Dinghuan [8775-32] SPS
Deniau, Guy [8774-52] SPS
Denis-Petit, David [8779-62] S13
Dereniak, Eustace L. Meeting VIP
Descamps, Dominique [8777-21] S7, [8780-11] S3
Desjarlais, Michael [WS100-12] S3
Deyra, Loïc [8780-25] S7
d'Humières, Emmanuel [8780-56] S11, [8780-67] S14, [8780-87] S14
Di Cicco, Andrea [8778-31] S6
Di Giovanni, Stefano [8774-56] SPS
Di Girolamo, Rocco [8771-33] S7
Di Maio, Francesco [8774-60] SPS
Di Martino, Fabio [8779-23] S6
Di Piazza, Antonino [8780-70] S14
Dias, Frederic [8775-21] S5
Dias, Jorge Miranda [8779-76] S19
Díaz, Francesc [8772-35] S8
Dickson, Wayne [8771-10] S3
Diletto, Claudia [8774-37] SPS
Dillner, Ulrich [8779-75] S19
Ding, Yuantao [8779-9] S2
Ditmire, Todd [8777-18] S5, [8779-39] SPS, [8779-59] S12, 8780 Program Committee, [8780-73] S15
Divoky, Martin [8780-15] S4, [8780-35] SPS, [8780-37] SPS, [WS100-5] S2
Djotyan, Gagik P. [8773-42] S7
Dlabka, Jakub [8777-11] S3
Dluzewski, Piotr [8777-15] S4
Dneprovskii, Vladimir S. [8772-9] S2
Dochshanov, Alden [8774-10] S2
Doerr, Christopher R. 8781 Program Committee
Dohlus, Martin [8779-68] S16, [8779-69] S16
Doizi, Denis M. G. [8774-52] SPS
Dolci, Luisa Stella [8774-32] S7
Dollar, Franklin J. [8779-22] S5
Domagala, Jaroslaw Z. [8773-22] SPS
Domanski, Andrzej W. [8774-4] S1

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Dombi, Peter 8780 Program Committee, [8780-59] S12
Dominec, Filip [8771-21] S5
Dominguez, Alberto [8774-56] SPS
Dorchies, Fabien [8777-21] S7, [WS100-42] S4
Dorenbos, Sander N. [8773-16] S4
Doria, Domenico [8779-52] S10
Doricak, Jan [8774-41] SPS
Dorkings, Sam [8779-50] S10
Doster, Jay [8780-40] S6
Doualan, Jean-Louis [8780-10] S3
Douchin, Bernard [8775-24] S6
Dove, Justin [8773-30] S5
Drazdys, Ramutis [8771-34] S8
Drexler, Guido A. [8779-56] S11
Driben, Rodislav [8772-20] S5, [8781-35] S8
Drozdova, Ekaterina [8776-9] SPS
Drška, Ladislav [8780-67] S14
Drysdale, Timothy D. [8771-47] SPS
Du, Henry H. [8775-3] S1
Duan, Guang-Hua [8781-12] S3
Duan, Zhongchao [8775-32] SPS
Dubecký, František 8777 S13
Session Chair, [8777-56] S15
Dubroca, Bruno [WS100-15] S3
Dubrouil, Antoine [8780-11] S3
Dubrovina, Natalia [8771-12] S3, [8771-4] S1
Ducci, Sara [8773-35] S6
Duffield, Stuart J. [8780-1] S1
Dumon, Pieter [8781-1] S1
Dunne, Mike Symposium Chair, WS100 Conference Chair, [WS100-2] S1
Durán-Sánchez, Manuel [8772-45] SPS
Dusek, Miloslav 8773 Program Committee, [8773-32] S5
Düsterer, Stefan [8777-14] S4
Dybko, Artur 8774 Program Committee
Dyer, Gillis [8779-39] SPS
Dziarzhyski, Siarhei [8778-42] SPS

E

Eckl, Johann [8773-9] S2
Eckstein, Andreas [8773-35] S6
Edmond, Samson [8781-32] S8
Edwards, Chris Symposium Chair, WS100 Conference Chair, [WS100-1] S1, [WS100-27] S5
Edwards, Ray D. [8780-1] S1
Egan, David A. [8780-1] S1
Eggleton, Benjamin J. 8775 Program Committee
Eguizabal, Iñigo [8774-56] SPS
Ehresmann, Arno [8774-55] SPS
Ehsan, Abang Annuar [8772-60] SPS
Eisermann, René [8772-27] S7
Eisert, Jens S. 8773 Program Committee
Ejrnaes, Mikkel [8773-15] S4, [8773-17] S4
Ekimov, Dmitry A. [8776-18] S4
Elissalde, Catherine [8771-21] S5
Elsmann, Tino [8774-5] S1
Elsmere, Stephen P. [8780-1] S1
Elsner, Ronald F. [8777-31] S10
Emprin, Benoit 8777 S14 Session Chair, [8777-46] S13
Emslie, Christopher 8775 Program Committee
Endo, Akira [8780-23] S6, [8780-30] SPS, [8780-39] SPS, [8780-9] S3

Enghardt, Wolfgang 8779 Program Committee, [8779-53] S11, [8779-54] S11
Erko, Alexei [8777-38] S11, [8777-55] S15
Ersfeld, Bernhard [8779-76] S19, [8779-78] S20
Ershov, Petr [8777-39] S11, [8777-41] S11, [8778-46] SPS
Ertel, Klaus 8780 Program Committee, [8780-5] S2, [8780-78] S15, [WS100-4] S2
Ertman, Slawomir [8774-4] S1
Esarey, Eric 8779 Conference Chair, 8779 S1 Session Chair, [8779-7] S2, [8779-9] S2
Esirkepov, Timur Zh. [8780-51] S11
Esmaeil Zadeh, Iman [8773-16] S4
Esposito, Emanuela [8774-1] S1, [8774-69] SPS
Esposito, Laura [8780-18] S5
Estensoro, Patxi [8774-56] SPS
Estudillo-Ayala, Julián Moisés M. [8772-16] S4
Evangelatos, Christos [8780-25] S7
Eve, Sophie [8775-24] S6
Everitt, Mark J. [8771-38] S8, [8773-41] S7
Evtikhiev, Nikolay N. [8776-28] SPS
Ewald, Melanie [8774-28] S6
Eyderman, Sergey L. [8771-16] S6
Ezzo, Kevin M. [8777-42] S12, [8780-21] S6

F

Fäcke, Thomas [8776-2] S1
Faenov, Anatoly Ya. [8779-14] S4, [8779-45] SPS
Fages, Mathias [8774-52] SPS
Falciai, Riccardo [8774-23] S4
Fallica, Pier Giorgio G. [8773-1] S1
Fan, Chen-Feng [8775-5] S1
Farmer, John P. 8779 S17 Session Chair, [8779-76] S19, [8779-78] S20
Farzami, Yasin [8772-5] S1
Faure, Jérôme [8779-4] S1
Fausti, D. [8778-32] S6
Faustov, Alexey V. [8774-2] S1
Fávero, Fernando C. [8774-65] SPS
Favero, Ivan [8773-35] S6
Fazio, Eugenio [8772-18] S5
Fedeli, Luca [WS100-24] S4
Fedosejevs, Robert [WS100-24] S4
Fedrizzi, Alessandro [8773-30] S5
Feigl, Torsten [8777-25] S7, [8777-4] S2
Felbacq, Didier 8771 Program Committee
Felber, Matthias [8778-26] S5
Feng, Yiping [8778-10] S3
Feranchuk, Ilya D. [8777-13] S3, [8778-41] SPS
Fernández Tobías, Javier [WS100-26] S5, [WS100-28] S5
Fernández, Eduardo [8776-26] S6
Fernández, Juan C. [8779-59] S12
Fernandez, Juan C. [8779-39] SPS
Fernandez-Perea, Monica [8777-1] S1
Ferrari, Luca [8774-14] S2
Ferrari, Maurizio [8781-23] S5
Fery, Andreas [8771-32] S7
Feugeas, Jean-Luc [WS100-15] S3, [WS100-17] S3, [WS100-42] S4
Février, Sébastien 8775 Program Committee
Fibrich, Martin [8780-74] S15
Ficek, Zbigniew [8773-43] S7
Fiedler, Tobias [8777-25] S7
Fiedorowicz, Henryk 8777 Program Committee, [8777-44] S12, [8777-53] S14, [8777-7] S2
Fiers, Martin [8781-1] S1
Fikerovala, Helena [8773-32] S5
Filimonov, Vladimir [8777-27] SPS
Filip, Radim [8773-32] S5
Filloux, Pascal G. [8773-35] S6
Fimia-Gil, Antonio 8776 Conference Chair, 8776 S1 Session Chair, 8776 S4 Session Chair, 8776 S6 Session Chair, [8776-23] S5, [8776-26] S6, [8780-75] SPS
Fineschi, Silvano [8777-48] S13
Finkelstein, Hod [8781-30] S7
Firsov, Alexander [8777-38] S11, [8777-55] S15
Fischer, Alexis P. [8772-8] S2
Fiurásek, Jaromír 8773 Conference Chair, 8773 S5 Session Chair, 8773 S6 Session Chair, 8773 S7 Session Chair, [8773-32] S5
Fiuzza, Frederico [8779-10] S3, [WS100-16] S3
Fleckenstein, Holger [8777-29] SPS, [8778-32] S6
Floquet, Vincent [8779-20] S5
Flores Rosas, Ariel [8772-45] SPS
Flores, G. [8775-21] S5
Florido, Ricardo [WS100-13] S3
Florjanczyk, Mirek [8781-6] S2
Flöter, Bernhard [8778-39] SPS
Flöttmann, Klaus [8779-3] S1
Foerst, M. [8778-43] SPS
Fok, Tomasz [8777-44] S12, [8777-53] S14
Folpini, Giulia [WS100-37] SPS, [WS100-41] SPS
Fonseca, Ricardo A. [8771-53] SPS, [8779-10] S3, [8779-72] S17, [8779-8] S2, [8780-55] S11, [8780-68] S14, [8780-84] S16, [WS100-16] S3
Forestier-Colleone, Pierre [WS100-41] SPS
Forestiere, Carlo [8771-33] S7
Forton, Eric [8779-64] S13
Fotiadi, Andrei A. [8772-29] S7, [8774-2] S1
Fourcade-Dutin, Coralie [8780-11] S3
Fournment, Claude [8777-21] S7, [WS100-24] S4, [WS100-42] S4
Fraatz, Bart [8778-37] SPS
Fraguito, Hugo L. [8781-16] S4
Fraile, Alberto [WS100-26] S5
Francic, Nina [8774-20] SPS
Frank, Milan [8775-7] S2
Fraser, George W. 8777 Program Committee
Frassetto, Fabio [8777-48] S13, [8778-11] S3, [8778-31] S6, [8778-38] SPS
Fremberg, Tino [8772-27] S7, [8781-45] SPS
French, Doug [8778-22] S5
Fretwurst, Eckhart [8777-19] S6, [8778-30] S6
Freund, Wolfgang [8778-24] S5
Freyberg, Michael J. [8777-33] S10
Fried, Jack [8773-11] S3
Friedl, Anna A. [8779-56] S11
Frigerio, Jacopo [8781-32] S8

Fritz, David Mark [8778-22] S5, [8778-27] S6
Frolov, Oleksandr [8777-22] S7, [8777-6] S2
Froufe-Pérez, Luis Salvador [8771-22] S5
Fuchs, Julien [8779-20] S5, [8779-77] S20
Fuh, Andy Ying-Guey [8772-54] SPS
Fujioka, Shinsuke [WS100-24] S4, [WS100-42] S4
Fukuda, Yuji [8779-14] S4
Fukui, Ryoosuke [8778-14] S3
Fulgentini, Lorenzo [8779-23] S6, [8779-40] SPS
Fuller, Lindsay [8779-39] SPS
Fülöp, József András [8779-17] S4, [8779-71] S17, [8780-62] S13
Funari, Riccardo [8774-19] S3

G

Gaal, Peter [8778-34] S6
Gagné, Mathieu [8781-20] S5
Gai, Xin [8772-6] S2
Galdi, Vincenzo [8774-69] SPS
Galeotti, Francesco [8774-27] S5
Galimberti, Marco [8780-2] S1, [8780-76] S15
Galland, Christophe [8781-5] S2
Gammino, Santo [8779-63] S12
Gang, So-Ra [8771-49] SPS
Gao, Weijun [8774-67] SPS
García de Abajo, Javier 8771 Program Committee, [8771-28] S6, [8771-8] S2
García Marín, Antonio [8774-21] S3
García Nuñez, Carlos [8774-21] S3
García, Fernando [8771-22] S5
García, Jesus [WS100-13] S3
Garcia-Martin, Antonio [8771-22] S5
Gardner, Mark [WS100-6] S2
Garoz Gomez, David [WS100-26] S5, [WS100-28] S5, [WS100-33] S5
Gaskin, Jessica A. [8777-31] S10
Gasparini, Leonardo [8773-4] S1
Gatti, Giancarlo [8778-4] S1, [8779-46] SPS
Gaudin, Jérôme 8777 Program Committee, [8777-15] S4, [8777-16] S4, [8777-20] S6, [8777-23] S7, [8778-12] S3
Gauglitz, Guenter G. 8774 Program Committee, 8774 S5 Session Chair, [8774-16] S2, [8774-17] S3, [8774-28] S6
Gaul, Erhard W. [8779-39] SPS, [8779-59] S12
Gautier, Donald C. [8779-39] SPS, [8779-59] S12
Gauvin, Serge [8772-50] SPS
Gawlitza, Peter [8778-51] SPS
Gazazyan, Emil A. [8772-61] SPS
Geddes, Cameron G.R. [8779-27] S6, [8779-7] S2
Geernaert, Thomas [8775-24] S6
Gehrke, Tim [8779-3] S1
Geissel, Matthias [8780-3] S1
Genovese, Marco [8773-34] S6
Gensch, M. [8777-51] S14, [8778-22] S5, [8778-43] SPS
Georges, Patrick [8780-25] S7
Germer, Susette [8774-25] S5
Gerth, Christopher 8778 Program Committee, 8778 S5 Session Chair, [8778-21] S4

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Ghasemi, Rasta [8771-13] S3
Ghenuche, Petru [8771-12] S3
Gheorghe, Diana G. [8772-3] S1
Ghioni, Massimo [8773-12] S3,
[8773-2] S1, [8773-34] S6
Giannessi, Luca [8778-32] S6
Giannetti, Ambra [8774-22] S4,
[8774-23] S4
Giannetti, Sara [8775-1] S1
Giardina, Paola [8774-53] SPS
Gibbon, Paul [8779-75] S19
Giessen, Harald W. 8771 Program
Committee
Giglia, Angelo [8777-17] S5, [8777-
48] S13
Gil, Juan M. [WS100-13] S3
Gibaldi, Maria Carla [8779-23] S6
Gilli, Eduard [8774-11] S2
Gil-Molina, Andrés [8781-16] S4
Giordano, Michele [8774-27] S5
Girling, Mark [8780-1] S1
Giudice, Andrea [8773-34] S6
Giuffrida, Lorenzo [WS100-24] S4
Giulietti, Antonio [8779-23] S6,
[8779-40] SPS, [8779-45] SPS
Giulietti, Danilo [8779-45] SPS,
[8779-46] SPS
Gizzi, Leonida A. [8779-20] S5,
[8779-23] S6, [8779-40] SPS,
[8779-45] SPS, [8779-46] SPS,
8780 Program Committee,
[8780-18] S5, [WS100-37] SPS
Gladush, Maxim G. [8772-21] S5
Gleeson, Michael R. [8776-22] S5,
[8776-25] S6, [8776-5] S1
Glenzer, Siegfried H. [8779-66] S15
Glesser, Marc [8779-15] S4
Glownia, James M. [8778-27] S6
Gneiding, Natalia [8771-23] S5
Gobet, Franck [8779-62] S13
Goikhman, Alexander [8777-41]
S11
Gokay, Ulas S. [8781-40] SPS
Golaszewska, Krystyna [8773-22]
SPS
Goldshteyn, Jewgeni [8778-34] S6
Golz, T. [8777-51] S14, [8778-22]
S5, [8778-43] SPS
Gomariz, María [8776-26] S6
Gombos, Marcello [8771-51] SPS
Gomina, Moussa [8775-24] S6
Gonçalves, Marcos S. [8776-24] S6
Gonçalves-Novo, Thierry [WS100-
3] S2
Gonschior, Cornell P. [8775-10]
S3
González, Augustín I. [8772-23] S6
González, María Ujué [8771-22] S5
Gonzalez-Arrabal, Raquel [WS100-
26] S5, [WS100-33] S5
Gopal, Amrutha [8779-75] S19
Gordillo, Nuria [WS100-26] S5
Gordon, Daniel F. 8779 S6 Session
Chair, [8779-1] S1
Gorkhover, Tais [8777-18] S5
Gospodinova, Vera Marinova
[8776-1] S1, [8776-4] S1
Goto, Shunji [8778-14] S3
Graafsma, Heinz [8778-30] S6
Graf, Albrecht [8774-5] S1
Grant, David W. [8779-76] S19
Gratus, Jonathan [8779-74] S18
Gray, Ross J. [8779-11] S3,
[WS100-12] S3, [WS100-24] S4
Green, Jonathan T. [8780-74] S15,
[8780-77] S15, [8780-82] S15
Greenhalgh, Justin [8780-5] S2,
[8780-78] S15, [WS100-4] S2
Greffet, Jean-Jacques 8771 S6
Session Chair, [8771-5] S2
Gremillet, L. [WS100-42] S4

Griebner, Uwe [8772-35] S8
Grigor'ev, Alexandr V. [8780-19] S5
Grigoryan, Gayane G. [8772-61]
SPS
Grishin, Evgeniy A. [8773-19] SPS
Grismayer, Thomas [8780-55] S11
Grittani, Gabrielle [8779-46] SPS
Grmela, Lubomír [8774-58] SPS
Grossman, Victoria [8772-62] SPS
Grósz, Tímea [8775-13] S3
Grote, Norbert [8781-3] S1
Gruebel, Gerhard [8778-32] S6,
[8778-5] S2
Grüner, Florian J. 8779 S7 Session
Chair, [8779-3] S1, [8779-69]
S16, [8779-9] S2
Grünert, Jan [8778-24] S5
Grunevald, Yves-Henri [8775-24]
S6
Gubarev, Mikhail V. [8777-31] S10
Gubin, Mikhail [8772-21] S5
Guerrero, Carlo [WS100-26] S5
Gulinatti, Angelo [8773-2] S1,
[8773-34] S6
Gullikson, Eric M. [8777-1] S1
Gumbrell, Edward [8780-1] S1
Guo, Jinxin [8776-22] S5, [8776-25]
S6, [8776-5] S1
Guo, Shanlong [8772-48] SPS
Gus'kov, Sergei Yu. [WS100-15]
S3, [WS100-17] S3, [WS100-22]
S4
Gussarov, Andrei [8774-2] S1
Gutt, Carsten Nils [8778-32] S6
Guziewicz, Marek [8773-22] SPS
Guzman, Angela Maria Meeting
VIP, 8772 Program Committee
Guzman, Robinson C. [8781-13] S3

H

Habisreuther, Tobias [8774-5] S1
Habs, Dietrich [8779-56] S11
Haendel, Sylvii [8773-39] S7
Hagen, Rainer [8776-2] S1
Haïdar, Riad [8771-9] S2, [8781-
27] S6
Hajdu, Janos [8777-29] SPS
Hájková, Vera [8777-15] S4, [8777-
16] S4, [8777-20] S6, [8777-23]
S7
Hajsek, Martin [8774-11] S2
Haley, Richard [WS100-27] S5
Halir, Robert [8781-7] S2
Hallman, Eric [8779-41] SPS
Han, Bo [8774-45] SPS
Han, Seungoh [8771-45] SPS
Han, Yashuai [8772-48] SPS
Handel, Peter H. [8780-66] S14
Hannachi, Fazia [8779-62] S13
Hanton, Fiona M. [8779-52] S10
Hanus, Vaclav [8780-67] S14
Hardhienata, Hendradi [8772-43]
S7
Harmand, M. [8778-22] S5
Harmand, Marion [8777-15] S4,
[8777-51] S14, [8778-27] S6
Harmand, Marion [8777-20] S6
Hartlaub, N. [8774-62] SPS
Hartmann, Paul [8781-33] S8
Harvey, Ewan J. [8780-1] S1
Hashim, Suhairul [8772-41] S9
Hass, Eugen [8778-21] S4
Hassan, Muhammad Hishar [8775-
30] SPS
Hatsagortsyan, Karen Z. [8780-71]
S14
Hauf, Steffen [8778-29] S6

Hau-Riege, Stefan P. [8777-1] S1
Haus, Joseph W. 8772
Conference Chair, 8772 S8
Session Chair, [8775-15] S4
Havlik, Petr [WS100-27] S5
Havlikova, Radka [8777-34] S10
Hayashi, Yukio [8779-14] S4
Haynes, Roger [8772-27] S7,
[8775-11] S3
Hayrapetyan, David Boris [8773-45]
SPS
Häyrynen, Teppo [8773-38] S6,
[8773-46] S7
He, Chongwen [8771-58] SPS,
[8780-34] SPS
He, Hongyan [8774-67] SPS
He, Jun [8772-48] SPS, [8773-44]
S7
He, Zhaohan [8779-4] S1
Heathcote, Robert I. [8780-2] S1,
[8780-76] S15
Hebling, János [8779-17] S4,
[8779-71] S17
Hegelich, Björn Manuel [8779-39]
SPS
Heimann, Philip A. [8777-1] S1
Hein, Joachim 8780 Conference
Chair, [8780-14] S4, [8780-15]
S4, [8780-17] S5, [8780-7] S2
Hejduk, Stanislav [8774-42] SPS,
[8774-63] SPS
Helal, Ahmed [8777-18] S5
Helle, Michael H. [8779-1] S1
Hellmann, Ralf [8774-62] SPS
Hellwing, Marco [8780-17] S5
Helm, Manfred [8774-25] S5
Heng, Sabrina [8774-3] S1
Henriet, Rémi [8772-24] S6
Hernandez-Gomez, Cristina 8780
Program Committee, [8780-2]
S1, [8780-5] S2, [8780-76] S15,
[8780-78] S15, [WS100-4] S2
Herzer, Sven [8779-75] S19
Hess, Ortwin [8771-6] S2
Heuer, Axel [8772-46] SPS
Hill, Matthew P. [8780-1] S1
Hillier, David Ianto [8780-1] S1
Hilz, Peter [8779-56] S11
Hingerl, Kurt [8772-43] S7
Hirsemann, Helmut [8778-30] S6
Hlavac, Martin [WS100-27] S5
Hlubina, Petr [8774-50] SPS,
[8774-6] S1, [8775-33] SPS
Ho, Yencheng [8779-5] S1
Hoarty, David J. [8780-1] S1
Hobbs, Lauren [8780-1] S1
Hochberg, Michael 8781 S3
Session Chair, [8781-5] S2
Hoffmann, Kay [8777-25] S7
Hoffmann, Kay [8777-18] S5
Hoger, Tim [8777-14] S4
Hohenester, Ulrich [8781-33] S8
Holldack, Karsten [8777-55] S15
Höller, Frank Stefan Meeting VIP
Holmström, Petter [8781-24] S6
Homer, Pavel [WS100-27] S5
Homola, Jiri Symposium Chair,
8774 Conference Chair, 8774
S2 Session Chair, [8774-13] S2,
[8774-14] S2
Hönel, Dennis [8776-2] S1
Hong, Byung Hee [8772-35] S8
Honrubia, José J. [WS100-24] S4,
[WS100-42] S4
Hooker, Chris J. [8780-76] S15
Hoppe, Robert [8778-15] S3
Hopps, Nicholas W. [8780-1] S1
Hora, Heinrich [8780-66] S14,
[8780-86] S16, [8780-90] SPS
Hornung, Marco [8780-17] S5

Hort, Ondrej [8780-11] S3
Hošek, Jan [8781-38] SPS
Hospodkova, Alice [8781-18] S4
Hossain, Anwar [8773-10] S3,
[8773-11] S3
Hostaša, Jan [8780-18] S5
Hou, Bixue X. [8779-4] S1
Houdré, Romuald 8781 Program
Committee
Hough, James [WS100-6] S2
Hoyland, James [8775-16] S4
Hrabovský, Miroslav 8776
Conference Chair, 8776 S3
Session Chair, 8776 S6 Session
Chair
Hrebicek, Jan [8780-80] S15,
[8780-82] S15
Hruda, Tomas Meeting VIP
Hsu, Ken-Yuh [8776-1] S1, [8776-
4] S1
Hu, Panpan [8771-58] SPS, [8780-
34] SPS
Hu, Xiaolon [8771-37] S8
Hu, Yi [8781-35] S8
Huang, Chen-Han [8774-57] SPS,
[8774-7] S1
Huang, Wei-Zhe [8772-39] S9
Huang, Zhirong [8779-9] S2
Hubka, Zbynek [8780-31] SPS
Hübl, Axel [8780-53] S11
Hudec, Marek [8777-43] S12
Hudec, René 8777 Conference
Chair, 8777 Program Committee,
[8777-43] S12
Hudec, René [8777-32] S10, [8777-
34] S10, [8777-36] S10
Hulicius, Eduard [8781-18] S4
Hulin, Sébastien [8777-21] S7,
[WS100-24] S4, [WS100-41]
SPS, [WS100-42] S4
Humble, Nicole [8779-56] S11
Hung, Te-Sheng [8779-5] S1
Hur, Moon Whe [8779-76] S19
Hurak, Zdenek [8777-43] S12
Hussey, Dianne [8780-1] S1
Huthmacher, Klaus [8777-28] SPS
Hwang, Nam [8776-27] S6
Hwang, Yeon [8781-42] SPS

I

Iadicco, Agostino [8774-27] S5
Iatsunskyi, Igor [8774-51] SPS
Ibarra-Escamilla, Baldemar
[8772-45] SPS
Inneman, Adolf J. [8777-32] S10,
[8777-34] S10, [8777-36] S10,
[8777-43] S12
Inubushi, Yuichi [8777-16] S4,
[8778-14] S3, [8778-23] S5
Ionin, Andrey A. [8772-55] SPS,
[8772-57] SPS
Iovine, Renato [8774-36] SPS
Irman, Arie [8779-70] S17
Isaac, R. [8779-76] S19
Isaenko, Ludmila I. [8772-56] SPS
Ischebeck, Rasmus [8778-19] S4
Isella, Giovanni [8781-32] S8
Ishikawa, Atsushi [8771-43] SPS
Ishikawa, Tetsuya [8778-14] S3
Itawi, Ahmad [8781-12] S3
Ivanov, Edward V. [8781-18] S4
Ivanov, Konstantin [8779-42] SPS
Ivanov, Martin T. [WS100-29] S5
Ivanov, Rosen [8778-25] S5
Ivanov, Sergey [8776-29] S6
Ivlyushkin, Denis [8777-27] SPS
Iwan, Bianca S. [8777-18] S5
Izaak, Tatyana [8772-64] SPS

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

J

Jablonski, Slawomir [WS100-23] S4
Jalmuzna, Wojciech [8778-20] S4
Jamali, Abdul Aleem [8774-55] SPS
Jambunathan, Venkatesan [8780-15] S4
James, Ralph B. Meeting VIP, 8773 S2 Session Chair, [8773-10] S3, [8773-11] S3
James, Steven [8780-1] S1
Jankovsky, O. [8777-34] S10
Janku, Jaroslav [8777-11] S3
Janz, Siegfried [8781-6] S2, [8781-7] S2
Jark, Werner H. [8777-37] S11
Jarocki, Roman [8777-44] S12, [8777-53] S14
Jaros, Jakub [8774-54] SPS
Jaroszynski, Dino A. 8779 Conference Chair, 8779 S15 Session Chair, [8779-43] SPS, [8779-73] S18, [8779-76] S19, [8779-78] S20
Jarrot, Leonard C. [WS100-24] S4
Jastrow, Ulf [8778-44] SPS
Jechow, Andreas [8772-46] SPS, [8773-39] S7
Jelínek, Michal [8772-52] SPS, [8775-7] S2
Jelínková, Helena [8772-52] SPS, [8780-31] SPS

Jeong, Tae Moon [8779-12] S3, [8779-31] S7, 8780 S16 Session Chair, [8780-57] S12, [8780-85] S16, [8780-88] S16
Jequier, Sophie [8780-87] S14
Jérôme, Arnaud [8777-47] S13
Jeschke, Harald O. [8777-8] S3
Ježek, Miroslav [8773-32] S5
Jhou, Jun-Guan [8779-5] S1
Jia, S. B. [8779-63] S12
Jian, Linke [8771-11] S3
Jiang, Xin-ying [8780-20] S5
Jimenez, Alvaro [8781-13] S3
Jinno, Satoshi [8779-14] S4
Jirka, Martin [8780-69] S14
Jochmann, Axel [8779-70] S17
Johnson, Nigel P. 8771 Program Committee, [8771-37] S8, [8771-47] SPS, [8774-15] S2
Jonnard, Philippe [8777-17] S5, [8777-50] S13
Joshi, Chandrashekhar J. [8779-10] S3, [8779-66] S15
Jovic, Dragana M. [8772-58] SPS
Juarez, Rafael [WS100-26] S5, [WS100-33] S5
Juchniewicz, Marcin [8773-22] SPS
Juckeland, Guido [8780-53] S11
Juha, Libor 8777 Conference Chair, 8777 S1 Session Chair, [8777-11] S3, [8777-15] S4, [8777-16] S4, [8777-20] S6, [8777-23] S7
Jung, Daniel [8779-39] SPS, [8779-59] S12
Juranic, P. [8778-42] SPS

Jurek, Marek [8777-20] S6
Juttula, Harri J. [8774-64] SPS

K

K., Srimannarayana [8774-49] SPS, [8775-28] S6
Kabanov, Vladimir V. [8780-19] S5
Kablukov, Sergey I. [8772-29] S7
Kachel, Torsten [8777-55] S15
Kadlec, Christelle [8771-21] S5
Kadlec, Filip [8771-21] S5
Kadulová, Miroslava [8775-33] SPS
Kafesaki, Maria 8771 Program Committee
Kaganovich, Dmitri [8779-1] S1
Kahle, Martin [8780-7] S2
Kaikkonen, Ville A. [8776-17] S4
Kaiser, Norbert [8777-25] S7
Kakande, Joseph [8781-14] S3
Kalabukhov, Viacheslav A. [WS100-32] S5
Kalal, Milan [WS100-39] SPS
Kaliataki, Artemis [WS100-30] S5
Kalinchenko, Galina [8779-22] S5
Kalinina, Karina V. [8781-18] S4
Kalinowska, Zosia [WS100-22] S4, [WS100-37] SPS
Käll, Mikael Meeting VIP
Kalli, Kyriacos 8775 Conference Chair, 8775 S1 Session Chair, 8775 S6 Session Chair, [8775-19] S5, [8775-21] S5, [8775-27] S6
Kaluza, Malte C. [8780-17] S5, [8780-7] S2
Kalvoda, Ladislav [8774-43] SPS
Kamiya, Tomihiro [8779-14] S4
Kanasaki, Masato [8779-14] S4
Kandadai, Nirmala [8777-18] S5
Kando, Masaki [8779-14] S4, [8779-46] SPS, [8780-51] S11
Kanevska, Olga [8774-51] SPS
Kanka, Jiri 8775 Conference Chair, 8775 S3 Session Chair, 8775 S5 Session Chair, [8775-26] S6, [8775-3] S1
Kar, Satyabrata [8779-52] S10
Karmakar, Anupam [8779-75] S19
Karsch, Leonhard [8779-53] S11, [8779-54] S11
Kartashov, Yaroslav V. [8772-19] S5
Kashyap, Raman 8781 Program Committee, [8781-20] S5
Kašik, Ivan [8772-52] SPS, [8774-66] SPS, [8775-31] SPS, [8775-7] S2, [8775-8] S2
Kasperczuk, Andrzej [WS100-22] S4
Kasztelaniec, Rafal Andrzej [8771-19] S4

SPIE Membership

A long-term investment that pays off

- ▶ 10 SPIE Digital Library downloads
- ▶ Complimentary online SPIE Journal
- ▶ 1 Complimentary online course
- ▶ Networking and access to information
- ▶ Discounts on events, courses, and publications
- ▶ Career advancement and peer recognition

Make SPIE your resource. Join or renew online today.

www.spie.org/membership

help@spie.org · +1 360 676 3290



Join or renew your SPIE Membership

1 year \$105 | 3 years \$297 | Lifetime \$995

Discounts for students and early career professionals



SPIE
Connecting minds. Advancing light.

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

- Katayama, Tetsuji [8778-14] S3, [8778-23] S5
Kato, M. [8771-8] S2
Kato, Yoshiaki [8780-51] S11
Kaufman, Jan [8780-85] S16
Kauranen, Martti 8772 S3 Session Chair, [8772-1] S1
Kawaguchi, Takashi [8774-26] S5
Kazaryan, Eduard M. [8773-45] SPS
Kazmierski, Christophe 8781 Program Committee
Ke, Linda [8771-58] SPS, [8780-34] SPS
Keil, Norbert [8781-3] S1
Keitel, Barbara [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-40] SPS, [8778-44] SPS
Keitel, Christoph H. 8779 Program Committee, [8780-71] S14
Keller, Arne [8773-35] S6
Kelly, Brian [8781-14] S3
Kemp, Gregory E. [WS100-24] S4
Kepak, Stanislav [8774-41] SPS, [8774-54] SPS
Keppler, Sebastian 8780 S7 Session Chair, [8780-17] S5
Kerr, Shaun M. [WS100-24] S4
Kessler, Alexander [8780-17] S5
Keto, John W. [8777-18] S5
Khan, Lutful [8775-27] S6
Khan, Saima Ishfaq [8771-47] SPS
Khatiry, Mahdieh [8780-29] SPS
Khazanov, Efim A. [8780-6] S2
Khokhar, Ali Z. [8771-37] S8
Khounsary, Ali 8777 Program Committee
Khyzhun, Oleg Yu [8772-56] SPS
Kicas, Simonas [8771-34] S8
Kidd, Andrew K. [8780-2] S1
Kiefer, Daniel [8779-56] S11
Kieffer, Jean-Claude 8779 Program Committee, 8780 S12 Session Chair, [8780-91] S13
Kielpinski, David [8773-39] S7
Kienberger, Reinhard 8772 Program Committee
Kilaru, Kiranmayee [8777-31] S10
Killow, Christian J. [WS100-6] S2
Kim, Alexander A. [8772-7] S2
Kim, Chul Min [8779-12] S3
Kim, Deok Gi [8771-49] SPS
Kim, Dong-Hyun [8777-57] SPS
Kim, Hye-Jeong [8781-42] SPS
Kim, Hyung Taek [8779-12] S3, [8780-85] S16, [8780-88] S16
Kim, I Jong [8779-12] S3, [8779-31] S7, [8780-85] S16, [8780-88] S16
Kim, Jangwoo [8778-14] S3
Kim, Jeong-Ho [8781-42] SPS
Kim, Jun Wan [8772-35] S8
Kim, Kangil [8774-35] SPS
Kim, Ki-Hyun [8773-10] S3
Kim, Sang-Mook [8771-49] SPS, [8776-27] S6
Kim, Taegyung [8777-57] SPS
Kimmel, Alexey V. [8772-3] S1
Kimmel, Mark W. [8780-3] S1
Kinet, Damien [8772-29] S7
Kinyaevskiy, Igor O. [8772-32] S7, [8772-55] SPS, [8772-57] SPS
Kirilyuk, Andrei [8772-3] S1
Kiriyama, Hiromitsu [8779-14] S4
Kiskinova, Maya [8778-32] S6, [8778-40] SPS
Kiss, Miklós [8775-13] S3
Kivshar, Yuri S. 8771 Program Committee, 8772 Program Committee
Klaiber, Michael [8780-71] S14
Klanner, Robert [8777-19] S6, [8778-30] S6
Kleijn, Emil [8781-2] S1
Klein, Karl-Friedrich [8775-10] S3
Klein, Moritz B. [8775-10] S3
Klepka, Marcin [8777-15] S4
Klimachev, Yurii M. [8772-55] SPS, [8772-57] SPS
Klimo, Ondrej [8779-20] S5, 8780 S14 Session Chair, [8780-69] S14, [8780-89] S16, [WS100-36] SPS
Klinger, Dorota [8777-15] S4
Klitsnick, Annie [8778-50] SPS
Klöpfel, Diethard [8780-7] S2
Kluge, Thomas [8779-13] S3, [8779-19] S5, [8780-53] S11
Kmetik, Viliam [8780-37] SPS
Knight, Jonathan C. 8775 Program Committee
Kobelke, Jens [8774-65] SPS
Koch, Andreas [8778-29] S6
Kocová, Lucie [8774-58] SPS
Kodet, Jan [8773-7] S2
Koechlin, Charlie [8771-9] S2
Koeester, Petra [8779-23] S6, [8779-45] SPS, [WS100-22] S4, [WS100-37] SPS
Koga, James K. [8780-51] S11
Kohn, Victor G. [8777-40] S11, [8778-46] SPS
Kokh, Alexander E. [8772-55] SPS, [8772-65] SPS
Kokh, Konstantin A. [8772-55] SPS, [8772-64] SPS, [8772-65] SPS
Kolacek, Karel [8777-22] S7, [8777-6] S2
Kolarik, Vladimir [WS100-27] S5
Kolbjonoks, Vadims [8776-12] SPS
Kolkovskiy, Valery [8773-22] SPS
Koller, Georg [8774-62] SPS
Kolosovsky, Eugeny [8781-37] SPS
Kolyuchkin, Vasily V. [8776-11] S3
Komodromos, Michael 8775 Program Committee, 8775 S2 Session Chair, [8775-19] S5, [8775-21] S5
Kondo, Kiminori [8779-14] S4
Konev, Leonid [8772-25] S6
Kong, Hong Jin [WS100-39] SPS
Konstantaki, Maria [8775-1] S1
Kopecky, Martin [WS100-27] S5
Kopecky, Milos 8776 Program Committee
Korenev, Vladimir V. [8772-31] S7
Koresheva, Elena R. [WS100-32] S5
Korn, Georg [8779-31] S7, [8779-63] S12, [8780-51] S11, [8780-60] S13, [8780-85] S16
Korn, Georg [8780-69] S14
Korn, Georg 8780 Conference Chair, 8780 S11 Session Chair
Korneev, Alexander A. [8773-18] S4
Körner, Jörg [8780-14] S4, [8780-15] S4, [8780-7] S2
Korolkov, Ilya [8772-65] SPS
Korous, P. [8780-74] S15
Koschitzki, Christian [8779-30] S7
Koshelev, Evgeniy L. [WS100-32] S5
Koška, Pavel [8775-31] SPS
Kostecki, Jerzy [8777-44] S12, [8777-53] S14, [8777-7] S2
Kostecki, Roman [8774-3] S1
Köstler, Stefan [8774-11] S2
Kotacka, Libor 8776 Program Committee
Kotkov, Andrey A. [8772-55] SPS, [8772-57] SPS
Kotynski, Rafal 8771 Program Committee, [8771-19] S4
Koudelka, Petr [8774-42] SPS, [8774-44] SPS, [8774-54] SPS, [8774-66] SPS
Koutris, Efstratios [8780-77] S15, [8780-80] S15
Koutsides, Charalambos [8775-21] S5
Kováč, Jaroslav [8777-56] S15
Kovács, Attila P. [8775-13] S3
Kowarschik, Richard M. [8776-5] S1
Koyama, Kazuyoshi [8779-35] S8
Koyama, Takahisa [8777-16] S4, [8778-14] S3
Kozhevnikov, Igor V. [8778-12] S3
Kozlov, Andrey Yu [8772-55] SPS, [8772-57] SPS
Kozlova, Maria [8772-9] S2
Kozlová, Michaela [8780-80] S15, [WS100-27] S5
Kraft, Stephan D. [8779-13] S3, [8779-54] S11
Kramer, Daniel [8779-31] S7, [8780-74] S15, [8780-77] S15, [8780-80] S15
Krasilenko, Irina A. [8774-39] SPS
Krasilenko, Oksana V. [8774-39] SPS
Krasilenko, Vladimir G. [8774-39] SPS
Krasilnikov, Mikhail [8778-36] SPS
Krauss, Thomas F. [8781-29] S7
Kravets, Yevgen [8779-73] S18
Kreis, Svea [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-44] SPS
Krieg, Anne K. [8774-16] S2
Kroll, Florian [8779-53] S11, [8779-54] S11
Kruchinin, Vladimir [8772-65] SPS, [8774-61] SPS
Krus, Miroslav [8779-46] SPS, [8780-85] S16
Krushelnick, Karl M. 8779 S4 Session Chair, [8779-22] S5, [8779-26] S6, [8779-4] S1
Kruszka, Renata [8773-22] SPS
Kryuchkyan, Gagik Yu. [8772-11] S2
Krzywinski, Jacek 8777 Program Committee, [8777-1] S1, [8777-15] S4, [8777-20] S6
Ksenzov, Dmitriy [8777-13] S3, [8778-41] SPS
Kuan Yew, Cheong [8774-61] SPS
Kuba, Michal [8772-28] S7
Kube, Gero [8778-48] SPS
Kubecek, Václav [8772-52] SPS, [8775-12] S3, [8775-7] S2
Kübler, Sebastian [8774-55] SPS
Kuczkowski, Michal [8774-4] S1
Kuhl, A. [8778-20] S4
Kuhlmann, Marion [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-45] SPS
Kuhn, Hendrik [8778-44] SPS
Kunstmann-Olsen, Casper [8775-16] S4
Kupriashin, Andrei I. [WS100-32] S5
Kurashima, Satoshi [8779-14] S4
Kurata, Hiroyuki [8776-20] S5
Kurze, Henning [8772-46] SPS
Kuster, Markus [8778-29] S6
Kuzanyan, Armen S. [8773-20] SPS
Kuzanyan, Astghik A. [8773-20] SPS
Kuzel, Petr [8771-21] S5
Kuzin, Evgeny A. [8772-45] SPS
Kuzmiak, Vladimir 8771 Conference Chair, 8771 S1 Session Chair, [8771-16] S6, [8771-18] S4, [8771-56] SPS
Kuznetsov, Alexey S. [8776-9] SPS
Kuznetsov, Ivan I. [8780-6] S2
Kuznetsov, Sergey [8777-40] S11, [8777-41] S11, [8778-46] SPS
Kveton, Milan [8780-89] S16
Kwiecien, Pavel [8771-56] SPS, [8774-13] S2, [8781-9] S2
Kwiecien, Pavel [8781-26] S6
-
- L**
- La Spada, Luigi [8774-36] SPS
Labanca, Ivan [8773-12] S3, [8773-2] S1
Labate, Luca [8779-20] S5, [8779-23] S6, [8779-40] SPS, [8779-45] SPS, [8779-46] SPS, [8780-18] S5, [WS100-37] SPS
Ladányi, Libor [8772-38] S9
Lalanne, Philippe 8781 Program Committee
Lalousis, Paraskevas [8780-90] SPS
Lambert, Guillaume [8779-6] S2
Lan, Sheng [8775-20] S5
Lancia, Livia [8779-77] S20
Lancok, Jan [8777-11] S3
Lancranjan, Ion I. [8780-36] SPS
Lanskii, Grigory V. [8772-55] SPS, [8772-57] SPS, [8772-64] SPS
Lapointe, Jean [8781-6] S2
Lapucci, Antonio [8780-18] S5
Lariciprete, Maria Cristina [8771-7] S2
Larger, Laurent [8772-24] S6
Lar'kin, Alexey [8779-42] SPS
Larruquert, Juan Ignacio [8777-48] S13, [8777-49] S13
Laschinsky, Lydia [8779-54] S11
Last, Arndt [8777-37] S11
Laszcz, Adam [8773-22] SPS
Latal, Jan [8774-42] SPS, [8774-44] SPS, [8774-63] SPS, [8774-66] SPS
Laub, Martin [8780-74] S15
Lavrinenko, Andrei V. 8771 Program Committee
Lawniczuk, Katarzyna [8781-13] S3
Lazarev, Alexander A. [8774-39] SPS
Lazari, L. [8775-21] S5
Lazoul, Mohamed [8772-8] S2
Le Bel, Edouard [WS100-9] S3
Le Garrec, Bruno J. 8780 Program Committee, 8780 S1 Session Chair, [8780-13] S4
Le Guen, Karine [8777-17] S5, [8777-50] S13
Le Liepvre, Alban [8781-10] S3
Le Marec, A. [8778-50] SPS
Le Roux, Xavier [8771-13] S3, [8771-4] S1, [8781-32] S8
Leal, Adriana [8774-30] S6
Lebiadok, Yahor V. [8780-19] S5
Ledingham, Kenneth W. D. 8779 Conference Chair, 8779 S10 Session Chair, 8779 S13 Session Chair
Lee, Jongmin [8780-88] S16
Lee, Jongmin [8779-12] S3
Lee, Kwang-Cheol [8771-49] SPS, [8776-27] S6
Lee, Luke P. [8772-34] S8
Lee, Seong Ku [8779-12] S3, [8780-85] S16, [8780-88] S16

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

- Leemans, Wim 8779 Conference Chair, 8779 S5 Session Chair, [8779-25] S6, [8779-7] S2, [8779-9] S2
- Lehe, Remi [8779-6] S2
- Leidner, Lothar [8774-28] S6
- Leijtsens, Xaveer J. M. 8781 Program Committee, [8781-13] S3, [8781-2] S1
- Leiner, Claude [8781-33] S8
- Leitenberger, Wolfram [8778-34] S6
- Leksin, Andrei Yu. [8772-21] S5
- Lelarge, Francois [8781-12] S3
- Lemaître, Aristide [8773-35] S6
- Lembessis, Vassilis E. [8773-43] S7
- Lemke, Henrik T. [8778-22] S5, [8778-27] S6
- Lemos, Nuno R. C. [8779-76] S19
- Lenci, Francesco [8779-23] S6
- Leo, Giuseppe [8773-35] S6
- Leonov, Aleksandr V. [8777-13] S3, [8778-41] SPS
- Leontowich, Adam F.G. [8777-29] SPS
- Lepchenkov, Kirill V. [8780-19] S5
- Lérondel, Gilles [8771-12] S3, [8771-4] S1
- Lesiak, Piotr [8774-4] S1
- Lettieri, Stefano [8774-19] S3
- Levato, T. [8779-46] SPS
- Levato, Tadzio [8779-23] S6, [8779-45] SPS
- Levesque, Quentin [8781-27] S6
- Li, Dazhang [8779-65] S15
- Li, Haoyu** [8776-25] S6
- Li, Haoyu [8776-5] S1
- Li, Kun [WS100-24] S4
- Li, Ming-Shian [8772-54] SPS
- Li, Ming-zhong [8780-20] S5
- Li, Yanlu [8781-1] S1
- Li, Yingying [8771-55] SPS
- Liang, Mengning [8777-29] SPS
- Liao, Meisong [8775-32] SPS
- Lieberman, Robert A.** 8774 Conference Chair
- Liebetrau, Hartmut [8780-7] S2
- Liedberg, Bo 8774 Program Committee
- Lifschitz, Agustin [8779-6] S2
- Lillie, Charles F.** [8777-42] S12
- Lim, Chang Sung [8771-39] SPS, [8771-41] SPS
- Limpouch, Jiri** [8779-31] S7, [8779-63] S12, [8780-69] S14, [8780-89] S16
- Lin, Ci-Yong [8772-54] SPS
- Lin, Gray** [8772-30] S7
- Lin, Hsing-Ying [8774-57] SPS, [8774-7] S1
- Lin, Hui-Chi [8772-54] SPS
- Lin, Jiunn-Yuan [8779-5] S1
- Lin, June Hua [8776-1] S1
- Lin, Shang Xin [8774-38] SPS
- Lin, Shiuian Huei** [8776-1] S1, [8776-4] S1
- Lin, Wen-Jen [8773-5] S1
- Lin, Yu H. [8776-4] S1
- Liner, Andrej [8774-41] SPS, [8774-42] SPS, [8774-44] SPS, [8774-54] SPS
- Liokumovich, Leonid B. [8774-2] S1
- Liseykina, Tatyana V. [8779-16] S4
- Little, Brent E. [8781-15] S4
- Litvik, Ján [8772-28] S7
- Liu, Dongliang [8781-3] S1
- Liu, Huifeng [8773-44] S7
- Liu, Ren C. [8776-4] S1
- Liu, Xiaochun [8774-70] SPS, [8774-71] SPS
- Livener, J. E. [8771-25] S6
- Lobnik, Aleksandra 8774 Program Committee, [8774-20] SPS, [8774-46] SPS
- Loch, Rolf Antonie 8777 S6 Session Chair, [8777-10] S3, [8777-15] S4, [8777-20] S6, [8778-13] S3
- Loeser, Markus [8780-4] S1
- London, Richard 8777 Conference Chair
- Londrillo, Pasquale [8779-57] S12
- Loos, Henrik [8778-18] S4
- Lopes, Nelson C. 8780 Program Committee, [8780-83] S16
- López-Mercado, Cesar A. [8772-29] S7
- Los, J. W. Niels [8773-16] S4
- Loffy, Simohamed Mokhtar [8772-8] S2
- Lou, Fei [8781-51] S7
- Louis, Eric [8777-10] S3, [8777-15] S4, [8778-13] S3
- Lourdudoss, Sebastian [8781-24] S6
- Lu, Yi-Chuan [8773-5] S1
- Lucianetti, Antonio [8780-15] S4, [8780-35] SPS, [8780-37] SPS, [WS100-5] S2
- Luciani, Valentina [8774-60] SPS
- Lucki, Michal [8775-22] S5, [8775-34] SPS
- Ludvigsen, Hanne 8775 Program Committee
- Lula, Brian Meeting VIP
- Lunáček, Jirí [8774-50] SPS
- Lundh, Olle [8779-24] S6
- Lupu, Anatole [8771-12] S3, [8771-13] S3, [8771-4] S1
- Lushnikov, Dmitriy S. [8776-11] S3, [8776-28] SPS, [8776-8] S2
- Luther-Davies, Barry [8772-6] S2
- Luyckx, Geert [8775-24] S6
- Lvovsky, Alexander I.** 8773 Program Committee
- Lyachev, Andrey [8780-76] S15
- Lynn, Nicholas Scott [8774-13] S2
- Lyubomirskiy, Mikhail [8777-40] S11, [8778-46] SPS
- Mahdiraji, Ghafour Amouzad [8775-29] S6, [8775-30] SPS
- Maheut, Yohann [WS100-37] SPS
- Mahne, Nicola [8777-17] S5, [8778-32] S6, [8778-40] SPS
- Mai, Dong-Du [8778-8] S2
- Maier, Andreas [8779-3] S1, [8779-32] S8, [8779-9] S2
- Maier, Robert R. J. [8774-29] S6
- Makimura, Tetsuya [8777-5] S2
- Maksimchuk, Anatoly M. [8779-22] S5
- Mäkynen, Anssi Jaakko [8774-64] SPS, [8776-17] S4, [8776-18] S4
- Malafronte, Anna [8774-10] S2
- Malka, Gerard [WS100-37] SPS
- Malka, Victor 8779 Program Committee, [8779-4] S1, [8779-6] S2
- Malomed, Boris A. [8772-20] S5, [8781-35] S8
- Malvezzi, A. Marco [8777-48] S13
- Mancuso, Adrian P. [8777-16] S4
- Manicardi, Alex [8775-1] S1
- Mann, Klaus 8777 Program Committee, [8777-4] S2, 8778 Program Committee, 8778 S3 Session Chair, [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-40] SPS
- Manquest, Christophe [8773-35] S6
- Manti, Lorenzo [8779-63] S12
- Maradudin, Alexei A. [8771-18] S4
- Margarone, Daniele [8779-31] S7, [8779-63] S12, [8780-85] S16
- Margulis, Walter 8775 Program Committee, [8775-1] S1
- Markert, Matthias [8778-44] SPS
- Markides, Christos** [8775-19] S5
- Markin, Vladimir V. [8776-28] SPS, [8776-8] S2, [8776-9] SPS
- Marklund, Mattias 8780 Program Committee
- Markos, Peter 8771 Conference Chair, 8771 S8 Session Chair
- Markova, A. A. [8777-54] S14
- Marocchino, Alberto [WS100-10] S3, [WS100-11] S3, [WS100-9] S3
- Marques, J. R. [8779-77] S20
- Marris-Morini, Delphine [8781-32] S8, [8781-7] S2
- Marrucci, Lorenzo [8773-31] S5
- Marsh, Kenneth A. [8779-66] S15
- Marsik, Jiri [8777-32] S10
- Marsikova, Veronika [8777-32] S10
- Martel, Pablo [WS100-13] S3
- Martin, Philippe [8779-20] S5
- Martins, Joana L. 8779 S19 Session Chair, [8779-72] S17, [8779-8] S2, [8780-55] S11, [8780-68] S14
- Martynkien, Tadeusz [8774-6] S1, [8775-25] S6
- Masciovecchio, Claudio [8778-6] S2
- Masek, Martin [8780-69] S14
- Mashanovich, Goran Z. 8781 S2 Session Chair, [8781-29] S7
- Mashkovtsev, Mikhail [8777-27] SPS
- Mason, Paul D. [8780-5] S2, [8780-78] S15, [WS100-4] S2
- Masood, Umar [8779-53] S11
- Massard, Thierry [WS100-19] S4
- Massari, Nicola [8773-4] S1
- Massone, Giuseppe [8777-48] S13
- Mat Shariff, Khairul Anuar [8775-29] S6
- Matejec, Vlastimil [8772-52] SPS, [8775-31] SPS, [8775-7] S2, [8775-8] S2
- Mateos Ferre, Xavier [8772-35] S8
- Matsubara, Takaaki [8776-20] S5
- Matsumura, Yosuke [8779-35] S8
- Matsuyama, Satoshi [8778-14] S3
- Matthews, Jonathan C. [8781-36] S1
- Matuevich, Vladislav [8776-5] S1
- Maximov, Mikhail V. [8772-31] S7
- May, Torsten [8779-75] S19
- Maynard, Gilles [8779-2] S1
- Mazanec, Tomas [8780-82] S15
- Mazzillo, Massimo Cataldo [8773-1] S1
- McKenna, Paul 8779 Conference CoChair, 8779 S11 Session Chair, [8779-11] S3, [WS100-12] S3, [WS100-24] S4
- McKinney, Wayne R. [8777-1] S1
- McLean, Harry S. [WS100-24] S4
- Meadows, A. R. [8779-39] SPS
- Méchin, David [8775-2] S1
- Medrik, Tomas [8780-80] S15
- Medvedev, N. [8777-51] S14, [8778-22] S5
- Medvedev, Nikita A. [8777-28] SPS, [8777-8] S3
- Mégret, Patrice [8774-2] S1
- Melich, Radek [8777-22] S7
- Melloni, Andrea I. 8781 Program Committee
- Melnikov, Leonid A. [8771-20] S5
- Melitchakov, Evgueni [8777-47] S13
- Mendez, Alexis** 8775 Conference Chair, 8775 S4 Session Chair
- Méndez, José Antonio [8777-48] S13, [8777-49] S13
- Mendonça, Cleber R. [8776-24] S6
- Mendoza, Miguel A. [WS100-13] S3
- Meneses, David [8771-22] S5
- Meng, Limin [8778-50] SPS
- Meng, Wendong [8773-13] S3
- Menif, Mourad [8781-50] SPS
- Menkyna, Róbert [8772-38] S9
- Menon, P. Susthitha** [8772-60] SPS
- Menzel, Ralf [8772-46] SPS
- Mercier, Raymond F. [8777-47] S13
- Merget, Florian [8781-30] S7
- Mergo, Pawel [8774-6] S1, [8775-24] S6, [8775-25] S6
- Merkuliev, Yuri [WS100-40] SPS
- Metzkes, Josefine [8779-13] S3, [8779-54] S11
- Mével, Eric [8780-11] S3
- Mey, Tobias [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-40] SPS
- Meyer, Hans-Georg [8779-75] S19
- Miano, Giovanni [8771-33] S7
- Miari, Luca [8773-12] S3
- Michalek, Vojtech [8773-21] SPS, [8773-8] S2
- Michalski, Doerte [8779-56] S11
- Michette, Alan G. 8777 Program Committee, [8777-30] SPS
- Miclos, Sorin I. [8780-36] SPS
- Micuda, Michal [8773-32] S5
- Midorikawa, Katsumi [8777-3] S2
- Migdall, Alan L.** [8773-34] S6
- Mika, Martin [8777-34] S10
- Mikhailova, J. [8772-22] S6
- Mikhailova, Maya P. [8781-18] S4
- Mikova, Martina [8773-32] S5
- Miler, Miroslav** Meeting VIP, 8776 Program Committee
- Miller, David A. B. [8781-25] S6
- Milman, Perola [8773-35] S6

M

- M., Maggiore [8779-63] S12
- Ma, Chang-Ming C. 8779 Program Committee
- Ma, Pan [8772-6] S2
- Ma, Wenjun [8779-56] S11
- MacArthur, James [8780-3] S1
- Macchi, Andrea [8779-16] S4, [8779-20] S5
- MacFarlane, Lewis [WS100-27] S5
- MacKay, Peter E.** [WS100-6] S2
- Mackenroth, Felix [8780-70] S14
- MacLellan, David [8779-11] S3, [WS100-12] S3
- MacPherson, William N. [8774-29] S6
- Macúchová, Karolina [8781-38] SPS
- Maddalena, Pasqualino [8774-19] S3
- Madden, Steve J. [8772-6] S2
- Madrigal, Roque Fernando [8776-23] S5, [8776-26] S6, [8780-75] SPS
- Maglione, Mario [8771-21] S5
- Mahamd Adikan, Faisal Rafiq [8775-29] S6

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Milne, Chris J. [8778-49] SPS
Milton, Graeme [8771-1] S1
Mimura, Hidekazu [8778-14] S3
Mineo, Teresa [8777-33] S10
Minguez, Emilio [WS100-13] S3
Miotti, Paolo [8777-48] S13, [8778-31] S6
Miquel, Jean-Luc [WS100-42] S4
Mirasoli, Mara [8774-32] S7
Mishanov, Ivan V. [8772-36] S9
Mitsube, Ken [8776-21] S5
Mitzner, Rolf M. [8777-55] S15
Miura, Taisuke [8780-23] S6, [8780-30] SPS, [8780-39] SPS, [8780-9] S3
Mizaikoff, Boris [8774-28] S6
Mizanur, Rahman M. A. K. [8775-30] SPS
Mo, Mianzhen [WS100-24] S4
Mocek, Tomás 8777 Program Committee, [8779-31] S7, [8780-15] S4, [8780-23] S6, [8780-30] SPS, [8780-35] SPS, [8780-37] SPS, [8780-39] SPS, [8780-85] S16, [8780-9] S3, [WS100-5] S2
Mocella, Vito [8771-14] S3, [8771-51] SPS, [8771-52] SPS, [8781-21] S5, [8781-48] SPS
Moeller, Stefan P. [8777-15] S4
Mohd Noor, Noramaliza [8775-30] SPS
Mokhtar, Mohd. Ridzuan [8775-29] S6
Molina-Fernandez, Iñigo 8781 Conference Chair, 8781 S5 Session Chair, 8781 S8 Session Chair, [8781-7] S2
Möller, Stefan [8777-20] S6
Möller, Thomas [8777-18] S5
Molls, Michael [8779-56] S11
Molodtsov, Serguei [8778-24] S5
Molokeev, Maxim S. [8771-50] SPS, [8772-62] SPS
Momose, Atsushi [8778-14] S3
Moncorgé, Richard [8780-10] S3
Monro, Tanya M. [8774-3] S1
Montanez, Paul A. [8777-1] S1
Mora, Patrick [8779-2] S1
Morace, Alessio [WS100-24] S4, [WS100-42] S4
Moral, Nuria [WS100-26] S5
Morandotti, Roberto [8781-15] S4, [8781-35] S8
Mori, Warren B. [8779-10] S3, [8779-8] S2, [WS100-16] S3
Morvillo, Pasquale [8774-37] SPS
Moser, Herbert O. [8771-11] S3
Moses, Edward I. Meeting VIP
Moss, David J. [8781-15] S4
Mottay, Eric P. [8780-10] S3
Mounaix, Patrick [8771-21] S5
Mourou, Gérard A. [8779-77] S20, [8780-50] S11
Moustazis, Stavros [8780-90] SPS, [WS100-30] S5
Mrázek, Jan [8775-18] S4, [8775-8] S2
Müglich, Nicolas [8774-55] SPS
Mukherjee, Subhrangsu [8777-17] S5
Mukhin, Ivan B. [8780-6] S2, [8780-8] S2
Müller, Carsten [8780-71] S14
Müller, Lutz [8778-32] S6
Müller, Matthias [8777-4] S2
Müllerová, Jarmila [8772-38] S9, 8781 Program Committee
Muneeb, Muhammad [8781-29] S7
Munro, William J. [8773-41] S7
Murakami, Kouichi [8777-5] S2

Murciano, Angel [8776-26] S6
Murphy, Chris [8779-11] S3
Mursyaidah, Ajis Intan [8775-29] S6
Musgrave, Ian 8780 S4 Session Chair, [8780-2] S1, [8780-76] S15
Mustafa, Salasiah [8775-30] SPS
Mwad Naife, Riyadh [8775-23] S5
Myndrul, Valera [8774-51] SPS
Myoren, Hiroaki [8773-15] S4
Myroshnychenko, Viktor [8771-28] S6, [8771-8] S2

N

Nagai, Kouji [8774-26] S5
Nagali, Eleonora [8773-31] S5
Nagasono, Mitsuru [8777-20] S6, [8777-23] S7
Nagaya, Kohta [8776-21] S5
Nagel, Wolfgang [8780-53] S11
Nagy, Ferenc [8773-1] S1
Naik, Dinesh Narayana [8776-14] S4
Nakamura, Daisuke [8777-5] S2
Nakatsutsumi, Motoaki [WS100-24] S4
Nalini, Marcelo [8776-19] S5, [8776-24] S6
Nam, Kee Hwan [8779-31] S7, [8780-85] S16
Nannarone, Stefano [8777-17] S5, [8777-48] S13
Nardini, Massimo [8774-32] S7
Narimanov, Evgenii E. [8771-25] S6
Narozhny, Nikolay 8780 Program Committee
Nascetti, Augusto [8774-31] S7, [8774-32] S7
Naseri, Neda [8779-38] SPS, [8779-41] SPS
Natsui, Takuya [8779-35] S8
Navirian, Hengameh [8778-34] S6
Navratil, Petr [8775-12] S3
Naylon, Jack [8780-82] S15
Nazabal, Virginie [8772-19] S5
Necas, Vladimír [8777-56] S15
Nedeljko, Polonca [8774-20] SPS, [8774-46] SPS
Nedeljkovic, Milos [8781-29] S7
Nedukh, Sergey V. [8772-37] S9
Neely, David [8779-11] S3, 8780 Program Committee, 8780 S15 Session Chair, [8780-2] S1, [8780-76] S15, [8780-79] S15, [WS100-12] S3, [WS100-27] S5
Nees, John A. [8779-4] S1
Nefedov, Evgeny I. [8771-20] S5
Nefedov, Igor S. [8771-20] S5
Negoita, Florin 8780 Program Committee
Nejdl, Jaroslav [WS100-27] S5
Nejzchleb, Karel [8780-31] SPS
Nekvindová, Pavla [8775-8] S2
Nemcova, Šárka [8781-38] SPS
Nemec, Hynek [8771-21] S5
Nemec, Petr [8772-19] S5
Nevrly, Václav [8777-11] S3
New, Geoffrey H. C. 8772 Program Committee
Nguyen, Mai-Chi [8774-3] S1
Nickles, Peter V. [8779-12] S3
Nicolai, Philippe [WS100-15] S3, [WS100-17] S3, [WS100-24] S4, [WS100-37] SPS, [WS100-42] S4
Nicolov, Mirela F. [8771-44] SPS
Niino, Hiroyuki [8777-5] S2

Nikolenko, Anton D. [8777-27] SPS
Nikolov, Ivaylo [8778-25] S5
Nikolsky, Aleksandr I. [8774-39] SPS
Nikonorov, Nikolay V. [8772-7] S2
Nindrayog, Amritpal S. [8779-16] S4
Nishimura, Yuki [8776-21] S5
Nisoli, Mauro [8778-38] SPS
Nitiss, Edgars [8772-59] SPS
Noble, Adam [8779-73] S18, [8779-74] S18
Nocerino, Gaetano [8773-33] S5
Noginov, Mikhail A. [8771-25] S6
Noor, N. M. [8775-29] S6
Nordin, Abdul Jalil [8775-30] SPS
Norman, Michael J. [8780-1] S1
Norreys, Peter A. [8780-76] S15, [WS100-34] S3, [WS100-42] S4
Norton, Benjamin G. [8773-39] S7
Nosich, Alexander I. [8781-28] S6
Notley, Margaret M. [8780-2] S1
Novak, Jakub [8780-74] S15, [8780-77] S15, [8780-82] S15
Novák, Ondrej [8780-23] S6

O

Oades, Kevin [8780-1] S1
O'Brien, Jeremy L. 8773 Program Committee, [8781-36] S1
O'Carroll, John [8781-14] S3
Oda, Keiji [8779-14] S4
O'Dell, Stephen L. [8777-31] S10
Odinokov, Sergey B. [8776-11] S3, [8776-28] SPS, [8776-8] S2, [8776-9] SPS
Ohashi, Haruhiko [8777-16] S4, [8778-14] S3
Ohishi, Yasutake [8772-49] SPS, [8775-32] SPS
Ohmori, Takashi [8778-14] S3
Oishi, Yu [8779-46] SPS
Oishi, Yuji [8779-40] SPS
Oksanen, Jani [8773-38] S6, [8773-46] S7
Okubo, Kaito [8776-20] S5
Olivares-Vargas, Antonio de Jesus [8772-16] S4
Oliveira, Tatiana [8774-30] S6
Olszewski, Jacek M. [8774-6] S1, [8775-14] S4, [8775-25] S6
Omelchenko, Alexander Ivanovich [8772-31] S7
Oppelt, Melanie [8779-54] S11
Orehkov, Andrey [WS100-40] SPS
Orieux, Adeline [8773-35] S6
Ortega-Moñux, Alejandro [8781-7] S2
Osipov, Igor E. [WS100-32] S5
Osten, Wolfgang [8776-14] S4
Osvay, Károly [8780-62] S13
Ozawa, Shohei [8776-20] S5
Ozkan, Cigdem [8777-16] S4, [8777-20] S6, [8778-24] S5

P

Pachava, Vengalrao [8774-49] SPS
Pae, Ki Hong [8779-12] S3, [8780-88] S16
Pagliarulo, Vito [8773-17] S4
Pai, Chen-Hung [8772-30] S7
Pal, Atasi [8775-9] S2
Pal, Mrinmay [8775-9] S2
Palai-Dany, Tomáš [8774-58] SPS
Palashov, Oleg V. [8780-6] S2, [8780-8] S2
Palfalvi, Laszlo [8779-17] S4
Palfinger, Christian [8774-11] S2
Palmer, James [8780-1] S1
Pancheri, Lucio [8773-4] S1
Pang, Cheng-Xin [8781-11] S3, [8781-12] S3
Pangrac, Jiri [8781-18] S4
Panina, Ekaterina [8773-4] S1
Panina, Larissa V. [WS100-32] S5
Panizo, Miguel [WS100-26] S5
Papadopoulos, Dimitris N. [8780-25] S7
Papaioannou, Evangelos [8772-3] S1
Papayannis, Alexandros D. [8780-25] S7
Papes, Martin [8774-41] SPS, [8774-42] SPS, [8774-44] SPS, [8774-54] SPS
Papirek, Tomas [WS100-27] S5
Paradkar, Bhooshan S. [8779-2] S1
Pardo, Fabrice [8771-9] S2, [8781-27] S6
Pareschi, Giovanni 8777 Program Committee
Paris, P. [WS100-37] SPS
Park, Jaebum [WS100-24] S4
Park, Myoung Jin [8772-34] S8
Park, Namkyoo [8772-34] S8
Park, Seung Min [8772-34] S8
Park, Yoo Min [8774-35] SPS
Parker, Stefan J. F. [8780-1] S1
Parlato, Loredana [8773-15] S4, [8773-17] S4
Parry, Bryn T. [8780-2] S1, [8780-76] S15
Parsa, Zohreh [8780-29] SPS
Partanen, Mikko [8773-46] S7
Parys, Piotr [WS100-22] S4
Pasquazi, Alessia [8781-15] S4
Passoni, Matteo [8779-20] S5
Pastuszczyk, Anna [8771-19] S4
Pat, P. K. [8774-38] SPS
Patel, Praveesh K. [WS100-24] S4
Pathak, Vishwa B. [8779-8] S2
Pattathil, Rajeev Paramel [8780-76] S15
Pattthey, Luc [8778-49] SPS
Pau Vizcaíno, Jose Luis [8774-21] S3
Pauer, Hagen [8777-25] S7
Paulus, Gerhard G. [8778-33] S6, [8779-75] S19
Pausch, Richard [8780-53] S11
Pavlenko, Nickolay [8774-51] SPS
Pavlyuchenko, Ekaterina [8772-42] SPS
Pawelke, Jörg [8779-53] S11, [8779-54] S11
Pazos Perez, Nicolas [8771-32] S7
Peacock, Anna C. [8781-29] S7
Pearson, David D. [8777-42] S12
Peca, Marek [8773-21] SPS, [8773-8] S2
Peccianti, Marco [8781-15] S4
Peckus, Martynas [8771-34] S8
Pedersoli, Emanuele [8778-32] S6, [8778-40] SPS
Pedrini, Bill [8778-49] SPS
Pedrini, Giancarlo [8776-14] S4
Peebles, Jonathan [WS100-24] S4
Pegoraro, Francesco [8779-16] S4
Pellegrin, Eric J. [8777-24] S7
Pelli, Stefano [8774-22] S4
Pelouard, Jean-Luc [8771-9] S2, [8781-27] S6
Peña, Ovidio [WS100-26] S5
Peng, Lung-Han [8772-8] S2

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

- Penirschke, Andreas [8778-20] S4
Pepe, Giampiero [8773-15] S4, [8773-17] S4
Pepe, Giovanni Piero [8771-33] S7
Pepler, David A. [8780-2] S1
Peralta-Hernandez, Josue-Israel [8772-45] SPS
Pereira, Helena [8774-30] S6
Pereira, Tania [8774-30] S6
Perevezentsev, Evgeny A. 8780 S6
Session Chair, [8780-6] S2
Perez Sempere, Carlos [8777-24] S7
Perez, Frederic [WS100-42] S4
Perin, Jean-Paul [WS100-27] S5, [WS100-7] S2
Perina, Jan Meeting VIP, 8772
Program Committee, [8773-36] S6
Perinati, Emanuele [8777-33] S10
Perlado Martín, José Manuel [WS100-26] S5, [WS100-27] S5, [WS100-28] S5, [WS100-29] S5, [WS100-33] S5
Perlick, Florian [8778-48] SPS
Perske, Marco [8777-25] S7
Peruzzo, Alberto [8781-36] S1
Pesce, Giuseppe [8774-10] S2, [8774-9] S2
Peschel, Ulf [8771-23] S5
Pesme, Denis [8779-38] SPS
Peterka, Pavel [8775-12] S3, [8775-31] SPS, [8775-8] S2
Petit, Stéphane [8777-21] S7, [8780-11] S3
Petraakis, Panagiotis [WS100-30] S5
Petrov, George M. [8779-22] S5
Petrov, Valentin P. [8772-35] S8
Peyrusse, Olivier [8777-21] S7, [8777-9] S3
Pfeiffer, Franz 8779 Program Committee
Pfeiffer, S. [8778-20] S4
Phelan, Richard [8781-14] S3
Phillips, Paul J. [8780-5] S2, [8780-78] S15, [WS100-4] S2
Piacentini, Fabrizio [8773-34] S6
Piana, Angelo [8773-1] S1
Pichler, Heinz [8774-11] S2
Pietsch, Ullrich [8777-13] S3, [8778-41] SPS
Pikuz, Sergei A. [WS100-41] SPS
Pikuz, Tania [8779-45] SPS
Pikuz, Tatiana A. [8779-14] S4
Pilar, Jan [8780-37] SPS, [WS100-5] S2
Pina, Ladislav 8777 Conference Chair, 8777 Program Committee, [8777-32] S10, [8777-34] S10, [8777-36] S10, [8777-43] S12
Pindyurin, Valery F. [8777-27] SPS
Pinkhasova, Polina [8775-3] S1
Pintilie, Ioana [8777-19] S6
Piqueras, Juan [8774-21] S3
Pira, Peter [8777-11] S3
Pirozhkov, Alexander S. [8779-14] S4
Pirri, Angela [8780-18] S5
Pisarczyk, Pawel [WS100-22] S4
Pisarczyk, Tadeusz [WS100-22] S4, [WS100-23] S4, [WS100-37] SPS
Pisco, Marco [8774-27] S5
Pissadakakis, Stavros [8775-1] S1
Platonov, Yuriy Ya 8777 Program Committee
Plönjes, E. [8778-37] SPS, [8778-45] SPS
Plönjes-Palm, Elke C. [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-40] SPS
Podrazký, Ondrej [8772-52] SPS, [8775-18] S4, [8775-31] SPS, [8775-7] S2, [8775-8] S2
Poehl, Karin [8780-14] S4
Pokrovsky, Lev D. [8772-65] SPS
Polan, Jiri [WS100-27] S5
Poletto, Luca [8778-11] S3, [8778-31] S6, [8778-38] SPS
Poli, Federica [8775-23] S5
Politi, Jane [8774-53] SPS
Pollock, Bradley B. [8779-66] S15
Polyakov, Sergey V. [8773-34] S6
Pomerantz, Ishay [8779-39] SPS, [8779-59] S12
Pontius, Niko [8777-55] S15
Porter, John L. [8780-3] S1
Portillo, David [8772-23] S6
Porzio, Alberto [8773-33] S5
Possolt, Martin [8779-20] S5
Pottiez, Olivier J. [8772-45] SPS
Powell, Haydn [8779-11] S3, [WS100-12] S3, [WS100-24] S4
Powers, Peter E. [8775-15] S4
Prada, Alejandro [WS100-26] S5
Prandolini, M. J. [8777-51] S14, [8778-22] S5
Prasciolu, Mauro [8777-29] SPS
Preble, Stefan F. [8773-6] S2
Predki, Pawel [8778-26] S5
Preininger, Claudia 8774 Program Committee
Priebe, Gerd [8779-30] S7
Prochazka, Ivan 8773 Conference Chair, [8773-13] S3, [8773-21] SPS, [8773-7] S2, [8773-8] S2
Prochazka, Marek 8774 S6 Session Chair, 8774 S7 Session Chair, [8774-8] S2
Prokhorov, Alexei V. [8772-17] S4, [8772-21] S5
Prokopyeva, Elena [8774-58] SPS
Prokupek, Jan [8779-31] S7, [8779-63] S12, [8780-85] S16
Proška, Jan [8780-89] S16
Prudenzano, Francesco [8781-23] S5
Prukner, Vaclav [8777-22] S7, [8777-6] S2
Pryde, Geoff J. 8773 Program Committee
Psikal, Jan [8779-20] S5, [8779-63] S12, [8780-85] S16, [8780-89] S16
Puglisi, Donatella [8779-31] S7
Pukhov, Alexander 8779 Program Committee, 8780 Program Committee
Pun, Edwin Yue-Bun [8774-38] SPS
Putha, Kishore [8774-49] SPS
-
- Q**
- Qayyum, Hamza [8779-5] S1
Qi, Yue [8776-25] S6, [8776-5] S1
Qin, Chuan [8774-45] SPS
Quadir, Anita [8775-19] S5
Quero, Giuseppe [8774-1] S1, [8774-27] S5
Quidant, Romain Meeting VIP
-
- R**
- Raczka, Piotr [WS100-23] S4
Rafelski, Johann 8780 Program Committee, [8780-52] S16
Rahimi-Keshari, Saleh [8773-30] S5
Rahman, Azizur [8775-19] S5
Raimondi, Lorenzo [8778-32] S6, [8778-40] SPS, [8778-6] S2
Raj, Gaurav [8779-76] S19
Ralph, Joseph E. [8779-66] S15
Ralph, Timothy C. [8773-30] S5
Rambo, Patrick K. [8780-3] S1
Ramli, Ahmad Termizi [8772-41] S9
Ramsey, Brian [8777-31] S10
Randewich, Andrew [WS100-20] S4
Rasing, Theo [8772-3] S1
Rasnerova, Vladimira [8774-44] SPS
Ratajczak, Jacek [8773-22] SPS
Razdolski, Ilya [8772-3] S1
Rea, Ilaria [8774-53] SPS
Rebohle, Lars [8774-25] S5
Rech, Ivan [8773-12] S3, [8773-2] S1
Reed, Graham T. [8781-29] S7
Rehman, Saeed 8775 Program Committee
Reid, Paul B. 8777 Program Committee
Reil, Frank [8774-11] S2
Reimer, Chris [8781-15] S4
Reimer, Michael E. [8773-16] S4
Reinhard, Andreas [8779-75] S19
Reinhardt, Sabine [8779-56] S11
Reiss, Howard R. [8780-65] S14
Rem, Peter C. [8774-60] SPS
Rendina, Ivo Symposium Chair, [8771-14] S3, [8771-51] SPS, [8771-52] SPS, [8781-21] S5, [8781-48] SPS
Renis, Marcella [8779-63] S12
Renversez, Gilles [8772-19] S5
Rethfeld, Bärbel [8777-28] SPS
Reyes Herrera, Juan [8777-24] S7
Rhee, Yong-Joo [WS100-24] S4, [WS100-37] SPS
Ribeiro, Antonio [8781-1] S1
Ribeyre, Xavier [WS100-15] S3, [WS100-17] S3, [WS100-35] SPS, [WS100-36] SPS, [WS100-9] S3
Ricciardi, Armando [8774-1] S1, [8774-69] SPS
Rich, David W. [8777-1] S1
Richardson, David J. [8781-14] S3, [8781-17] S4
Richetta, Maria [WS100-37] SPS
Richter, Christian [8779-54] S11
Richter, Ivan [8771-56] SPS, [8774-13] S2, [8781-26] S6, [8781-9] S2
Richter, Mathias [8778-7] S2
Riconda, Caterina 8779 S18
Session Chair, [8779-20] S5, [8779-77] S20
Ridgers, Christopher P. [8779-11] S3, [8780-64] S14
Riedel, Robert 8777 S15 Session Chair, [8777-51] S14, [8778-22] S5, [8778-43] SPS
Riedel, Tomáš [8774-18] S3, [8774-33] SPS
Riezniak, Andres A. [8775-11] S3
Righini, Giancarlo C. [8774-22] S4
Ripamonti, Giancarlo [8773-3] S1
Rivera, Antonio [WS100-26] S5, [WS100-29] S5, [WS100-33] S5
Robert, Aymeric 8778 Program Committee, 8778 S2 Session Chair
Robinson, Alex Patrick Lowell [WS100-12] S3
Robinson, Jeffrey C. [8777-1] S1
Robinson, Joseph [8778-27] S6
Rocca, Jorge J. 8777 Program Committee
Roda, Aldo [8774-32] S7
Rodríguez, Alejandra [8776-26] S6
Rodríguez, Rafael [WS100-13] S3
Rodríguez-De Marcos, Luis [8777-48] S13, [8777-49] S13
Rodríguez-Emmenegger, Cesar [8774-18] S3, [8774-33] SPS, [8774-34] SPS
Rodríguez-Páramo, Angel [WS100-26] S5
Roelkens, Gunther [8781-29] S7
Rogers, Thomas D. [8777-32] S10
Röling, Sebastian [8778-51] SPS
Rölle, Thomas [8776-2] S1
Romano, Francesco Paolo [8779-63] S12
Romano, Silvia [8771-14] S3, [8771-51] SPS, [8781-21] S5
Romano, Valerio 8775 Program Committee
Romero-García, Sebastian [8781-30] S7
Rosenberger, Manuel [8774-62] SPS
Röser, Fabian [8780-4] S1
Rosinski, Marcin [WS100-22] S4, [WS100-37] SPS
Ross, Ian N. [8780-76] S15
Rossi, Francesco [8779-46] SPS, [8779-57] S12
Rotermund, Fabian [8772-35] S8
Roth, Markus 8779 S3 Session Chair
Roth, Markus 8779 Program Committee, [8779-33] S8, [8779-51] S10
Roth, Martin Matthias [8772-27] S7, [8775-11] S3
Rothhardt, Manfred [8774-5] S1, [8774-65] SPS
Rouified, Mohamed-Said [8781-32] S8
Rouillay, Marc [8777-47] S13
Rousse, Antoine 8779 Program Committee, [8779-6] S2
Rowen, Michael [8777-1] S1
Roy, Mohendra [8771-45] SPS
Roy, Utpal N. [8773-10] S3, [8773-11] S3
Rozmus, Wojciech [8779-38] SPS
Rubahn, Horst-Günter [8775-16] S4
Ruggeri, Alessandro [8773-34] S6
Ruiz, Eduardo [8774-21] S3
Rumpler, Markus [8774-11] S2
Rupp, Daniela [8777-18] S5
Rus, Bedrich 8777 Program Committee, 8780 Program Committee, 8780 S15 Session Chair, [8780-74] S15, [8780-77] S15, [8780-80] S15, [8780-82] S15, [WS100-27] S5
Rusciano, Giulia [8774-10] S2, [8774-37] SPS, [8774-9] S2
Russo, Giorgio [8779-23] S6
Rutkis, Martins A. [8772-59] SPS
Rutkowski, Marco [8777-14] S4
Ryabtsev, Andrew V. [8780-19] S5
Ryabtsev, Gennady I. [8780-19] S5
Ryskin, Alexander I. [8776-3] S1
-
- S**
- Sada, Cinzia [8772-18] S5
Sadi, Toufik [8773-38] S6
Saha, Maitreyee [8775-9] S2

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

- Sai Shankar, M. [8775-28] S6
Sajedi, Ali [8780-29] SPS
Sakaki, Hironao [8779-14] S4
Salditt, Tim [8778-8] S2
Salelev, S. E. [8771-38] S8
Salzenstein, Patrice [8772-24] S6, [8772-42] SPS
Samoylova, Liubov [8778-12] S3, [8778-51] SPS
Samson, John H. [8771-38] S8
Samuel, Edmund P. [8772-49] SPS
Sánchez, Consuelo [WS100-26] S5
Sanders, Steve [WS100-27] S5
Sandner, Wolfgang Meeting VIP, [8779-30] S7
Sanfilippo, Delfo D. [8773-1] S1
Sanner, Nicolas [8780-16] S4
Sano, Yasuhisa [8778-14] S3
Santangelo, Andrea E. [8777-33] S10
Santos, Ines [8774-30] S6
Santos, Joao Jorge [8777-21] S7, [WS100-15] S3, [WS100-24] S4, [WS100-41] SPS, [WS100-42] S4
Sanz, Javier [WS100-26] S5, [WS100-33] S5
Sarangan, Andrew M. [8775-15] S4
Sarri, Gianluca [8779-34] S8
Sasso, Antonio [8774-10] S2, [8774-37] SPS, [8774-9] S2
Sato, Takashiro [8778-14] S3, [8778-23] S5
Satzinger, Valentin [8774-11] S2
Sauerbrey, Roland [8779-54] S11
Savastru, Dan M. [8780-36] SPS
Savastru, Roxana S. [8780-36] SPS
Savel'ev, Andrei [8779-42] SPS
Savelyev, Artem V. [8772-31] S7
Sävert, Alexander [8780-17] S5
Savoia, Silvio [8774-69] SPS
Sawada, Hiroshi [WS100-24] S4, [WS100-42] S4
Sawicka, Magdalena [8780-15] S4, [WS100-5] S2
Scarcella, Carmelo [8773-34] S6
Schäfer, Bernd [8778-16] S3, [8778-35] SPS, [8778-39] SPS
Schefer, Sven [8778-26] S5
Scheicher, Sylvia R. [8774-11] S2
Schell, Martin 8781 Program Committee
Schettino, Giuseppe [8779-52] S10
Schiavi, Angelo [WS100-10] S3, [WS100-11] S3, [WS100-9] S3
Schillaci, Francesco [8779-63] S12
Schlarb, H. [8778-20] S4, [8778-26] S5
Schleifer, Elad [8779-60] S13
Schleitzer, Stefan [8778-32] S6, [8778-5] S2
Schlenvoigt, Hans-Peter [WS100-24] S4
Schlenvoigt, Hans-Peter [WS100-42] S4
Schlott, Volker 8778 Program Committee, 8778 S4 Session Chair
Schlotter, William F. [8777-1] S1
Schmauss, Bernhard [8774-62] SPS
Schmid, Jens [8781-6] S2, [8781-7] S2
Schmid, Thomas E. [8779-56] S11
Schmidt, Albrecht [8779-75] S19
Schmidt, Andreas [8772-35] S8
Schmidt, B. [8778-21] S4
Schmidt, C. [8778-20] S4
Schmidt, Jiri [8777-22] S7, [8777-6] S2
Schmidt, Volker [8781-33] S8
Schmitt, Bernd [8778-30] S6
Schmitt, Felix [8780-53] S11
Schneidmiller, Evgeny [8778-2] S1, [8778-36] SPS, [8778-43] SPS, [8779-67] S16, [8779-68] S16, [8779-69] S16
Schnuerer, Matthias [8779-30] S7
Scholze, Frank [8777-2] S1
Schorb, Sebastian [8777-18] S5
Schorcht, Franke [8780-17] S5
Schramm, Ulrich [8779-13] S3, [8779-19] S5, [8779-54] S11, [8780-4] S1, [8780-53] S11
Schreiber, Joerg [8779-56] S11
Schreiber, Jörg [8779-18] S5
Schreiber, Ulrich [8773-9] S2
Schreiber, Ulrich 8773 Program Committee
Schroeder, Carl B. 8779 Conference Chair, 8779 S8 Session Chair, [8779-7] S2, [8779-9] S2
Schulz, Joachim [8777-20] S6, [8778-28] S6, [8778-32] S6
Schulz, Sebastian [8778-26] S5
Schulz, Sebastian [8778-20] S4
Schulze, Kai [8778-33] S6
Schürer, Michael [8779-54] S11
Schurtz, Guy [WS100-9] S3
Schuster, Kay 8775 Program Committee
Schwandt, Joern [8777-19] S6, [8778-30] S6
Schwartz, Brian T. [8779-36] S8
Schwarz, Jens [8780-3] S1
Schweitzer, Susanne [8781-33] S8
Sciarrino, Fabio 8773 Program Committee, [8773-31] S5
Scipinotti, Riccardo [8774-31] S7, [8774-32] S7
Scott, Graeme [8779-11] S3, [WS100-12] S3
Scott, R. H. H. [WS100-42] S4
Scuderi, V. [8779-63] S12
Secchi, Alberto [8774-56] SPS
Seefeldt, Michael [8772-46] SPS
Seibert, Marvin [8777-18] S5
Seifert, Reinhart [8780-7] S2
Sekacova, Maria [8777-56] S15
Selleri, Stefano [8775-1] S1, [8775-23] S5
Semencova, Veronika [8777-34] S10
Sen, Ranjan [8775-9] S2
Senderáková, Dagmar 8776 Program Committee
Sengupta, Dipankar [8775-28] S6
Sentis, Marc L. [8780-16] S4
Seo, Sungkyu [8771-45] SPS
Serpengüzel, Ali [8781-40] SPS
Serrano, Francisco A. [8776-23] S5
Serranti, Silvia [8774-59] SPS, [8774-60] SPS
Severová, Patricie [8780-23] S6, [8780-30] SPS
Sgarbossa, Antonella [8779-23] S6
Sgattoni, Andrea [8779-16] S4, [8779-20] S5
Shaari, Sahbudin Bin Haji [8772-60] SPS
Shadbolt, Pete [8781-36] S1
Shadrin, Nikita [8777-27] SPS
Shah, Rahul [8779-39] SPS, [8779-59] S12
Shaiduko, Anna V. [8772-55] SPS, [8772-57] SPS, [8772-64] SPS
Shaikh, Waseem [8780-2] S1, [8780-76] S15
Shannon, John H. [8775-10] S3
Shapoval, Olga V. [8781-28] S6
Shargorodskii, Victor D. [8773-19] SPS
Sharp, Graham J. [8771-37] S8
Shaw, Jessica [8779-66] S15
Shayduk, Roman [8778-34] S6
Shchemelev, Maxim A. [8780-19] S5
Shcheulin, Alexander S. [8776-3] S1
Shemmary, A. A. [8777-51] S14, [8778-22] S5, [8778-43] SPS
Sheng, Zheng-Ming 8779 Program Committee
Sheridan, John T. 8776 Conference Chair, 8776 S2 Session Chair, 8776 S5 Session Chair, 8776 S6 Session Chair, [8776-22] S5, [8776-25] S6, [8776-5] S1
Sherstnev, Evgeniy [8777-27] SPS
Shiao, Ming Hua [8771-43] SPS
Shieh, Hsiu-Li [8773-5] S1
Shields, Andrew J. 8773 Program Committee
Shimomura, Takuya [8779-14] S4
Shinozuka, Yuzo [8777-12] S3
Shiple, Ann [8777-32] S10
Shpolyanskiy, Yuri A. [8772-25] S6
Shulyapov, Sergey [8779-42] SPS
Shumilov, Yury P. [8773-19] SPS
Sibilia, Concita 8771 Program Committee, 8771 S3 Session Chair, [8771-35] S8, [8771-7] S2, 8772 S2 Session Chair, [8772-2] S1
Sics, Igors [8777-24] S7
Sidorov, Aleksandr Ivanovich [8772-7] S2
Siebold, Mathias 8780 Program Committee, 8780 S5 Session Chair, [8780-4] S1
Sieger, Markus [8774-28] S6
Siemer, Björn [8777-14] S4, [8778-51] SPS
Siewert, Frank 8777 S7 Session Chair, [8777-2] S1, [8777-38] S11, [8778-12] S3, [8778-51] SPS
Sigalotti, Paolo [8778-25] S5
Sikocinski, Pawel [8780-15] S4
Sikocinski, Pawel [8780-35] SPS, [8780-37] SPS, [WS100-5] S2
Silva, Luis O. [8771-53] SPS, 8779 Program Committee, [8779-10] S3, [8779-72] S17, [8779-8] S2, 8780 Conference Chair, 8780 S11 Session Chair, 8780 S16 Session Chair, [8780-55] S11, [8780-68] S14, [WS100-16] S3
Silverstone, Joshua W. [8781-36] S1
Simek, P. [8777-34] S10
Simon, Vojtech [8777-36] S10
Simovski, Constantin 8771 S4 Session Chair, [8771-27] S4
Simovsky, Constantin R. 8771 Program Committee
Sinelnichenko, A. K. [8772-56] SPS
Singh, Pushkar [8779-75] S19
Singha Roy, Subhamoy [8773-47] SPS
Sinigardi, Stefano [8779-57] S12
Sinn, Harald [8777-16] S4, [8777-20] S6, [8778-12] S3, [8778-51] SPS
Sinor, Milan [8780-67] S14
Sinworapun, Mantana [8771-37] S8
Sipová, Hana [8774-14] S2
Siska, Petr [8774-41] SPS, [8774-42] SPS, [8774-54] SPS, [8774-66] SPS
Skarvada, Pavel [8774-58] SPS
Skoda, Václav [8780-31] SPS
Skorupa, Wolfgang [8774-25] S5
Skrinsky, Jan [8777-11] S3
Skryabin, Dmitry V. [8772-20] S5
Slavik, Radan [8781-14] S3, [8781-17] S4
Slezák, Ondrej [8780-37] SPS, [WS100-39] SPS, [WS100-5] S2
Slysz, Wojciech [8773-17] S4, [8773-22] SPS
Smirnov, Alexander [8772-9] S2
Smirnov, Andrey V. [8776-11] S3
Smit, Meint K. [8781-2] S1
Smith, Martin D. [8774-29] S6
Smotrov, Dmitry A. [8775-20] S5
Smrž, Martin [8780-39] SPS, [8780-9] S3
Smyntyna, Valentin [8774-51] SPS
Snigirev, Anatoly A. 8777 Program Committee, [8777-39] S11, [8777-40] S11, [8777-41] S11, [8778-46] SPS
Snigireva, Irina I. [8777-39] S11, [8777-40] S11, [8777-41] S11, [8778-46] SPS
Sobierajski, Ryszard 8777 S3 Session Chair, [8777-10] S3, [8777-15] S4, [8777-16] S4, [8777-20] S6, [8777-23] S7, [8778-13] S3
Sobolev, Nikolai A. [8777-27] SPS
Sobolewski, Roman 8773 Conference Chair, 8773 S4 Session Chair, [8773-15] S4, [8773-17] S4, [8773-22] SPS
Sofer, Z. [8777-34] S10
Sokolowski-Tinten, Klaus [8777-51] S14, [8778-22] S5
Soldatov, Artem [8777-27] SPS
Solimeno, Salvatore [8773-33] S5
Solomashenko, Artem [8776-9] SPS
Sommer, Christian [8781-33] S8
Son, Hyokun [8776-27] S6
Sonnenfeld, Camille [8775-24] S6
Sorel, Marc [8781-29] S7
Sorokin, Andrei A. [8778-44] SPS
Sorokovikova, Anna [WS100-24] S4
Soufli, Regina 8777 S4 Session Chair, 8777 S5 Session Chair, [8777-1] S1
Soukoulis, Costas M. 8771 Program Committee
Spackova, Barbora [8774-13] S2
Spiller, T. P. [8771-38] S8, [8773-41] S7
Spirin, Vasily [8772-29] S7
Spittel, Ron [8774-65] SPS
Spohr, Klaus 8779 Conference CoChair
Stagira, Salvatore [8778-11] S3, [8778-31] S6
Stahl, Phil Meeting VIP
Stahoviak, John [8780-3] S1
Staliunas, Kestutis [8771-34] S8
Stamm, Christian [8777-55] S15
Starikov, Rostislav S. [8776-28] SPS
Starikov, Sergey N. [8776-28] SPS
Starobor, Alexey V. [8780-8] S2
Stefaniuk, Tomasz [8771-19] S4, [8771-26] S6
Steinke, Sven [8779-30] S7
Stellato, Francesco [8777-29] SPS
Stephan, Frank [8778-36] SPS

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Stephens, Richard B. [WS100-24] S4
Stifter, David [8772-43] S7
Stockem, Anne [8779-10] S3
Stockman, Mark I. 8772 Program Committee
Stojanovic, Nicola [8777-51] S14, [8778-22] S5, [8778-43] SPS
Stojanovic, Nikola [8778-3] S1
Stolarek, Marcin [8771-19] S4
Stolcová, Lucie [8779-20] S5, [8780-85] S16, [8780-89] S16
Stoppa, David [8773-4] S1
Störmer, Michael 8777 Program Committee, [8777-16] S4, [8777-2] S1, [8778-12] S3
Stoyanov, Nikolay D. [8781-18] S4
Strain, Michael [8781-29] S7
Straka, Ivo [8773-32] S5
Straka, Petr [8780-39] SPS
Straus, Jaroslav [8777-22] S7, [8777-6] S2
Streed, Erik W. [8773-39] S7
Strkula, P. [8780-77] S15
Su, Xue Mei [8772-10] S2
Sugioka, Koji [8777-3] S2
Sukhishvili, Svetlana A. [8775-3] S1
Šulc, Jan [8780-31] SPS
Šulc, Miroslav [8781-38] SPS
Sulejmani, Sanne [8775-24] S6
Sun, Tai-Ping [8773-5] S1
Sung, Jae Hee [8779-12] S3, [8780-85] S16, [8780-88] S16
Suppan, Michael [8774-11] S2
Suzuki, Takenobu [8772-49] SPS, [8775-32] SPS
Sveda, Libor [8777-34] S10
Svetina, Cristian [8778-32] S6, [8778-40] SPS, [8778-6] S2
Svetlichnyi, Valeriy A. [8772-55] SPS, [8772-64] SPS
Svozilik, Jiri [8773-36] S6
Swartz, Douglas A. [8777-31] S10
Sydlo, Cezary [8778-20] S4
Szcurek, Anna [8777-53] S14
Szcurek, Mirosław [8777-44] S12, [8777-53] S14
Szelag, Mateusz [8774-4] S1
Szewinski, Jaroslav [8778-20] S4
Szoplík, Tomasz 8771 Conference Chair, 8771 S7 Session Chair, [8771-26] S6
Sztuk-Dambietz, Jolanta [8778-29] S6

T

Ta Phuoc, Kim [8779-6] S2
Taiman, Kadni [8775-30] SPS
Tajima, Toshiki 8779 Program Committee, 8780 Program Committee
Takacs, Peter Z. 8777 Program Committee
Takahashi, Akihiko [8777-5] S2
Takayama, Shingo [8776-21] S5
Takeda, Mitsuo 8776 Program Committee
Talneau, Anne [8781-12] S3
Tamanis, Edmunds [8776-12] SPS
Tamasheva, Tatiana P. [WS100-32] S5
Tamazyan, Anahit [8772-11] S2
Tamburini, Matteo [8779-16] S4
Tamchek, Nizam [8775-29] S6, [8775-30] SPS
Tampo, Motonobu [8779-14] S4
Tanaka, Takuo [8771-43] SPS

Tanemura, Takuo [8781-25] S6
Tang, Qingle [8781-49] SPS
Tang, Shiang-Feng [8773-5] S1
Tang, Yu Hsiang [8771-43] SPS
Tang, YunXin [8780-76] S15
Tarapov, Sergey I. [8772-37] S9
Tarisien, Medhi [8779-62] S13
Tavella, Franz [8777-51] S14, [8778-22] S5, [8778-43] SPS
Tekhomsky, Viktor A. [8772-7] S2
Temporal, Mauro [WS100-9] S3
Tenzer, Christoph [8777-33] S10
Ter-Avetisyan, Sargis [8779-21] S5
Terracciano, Monica [8774-53] SPS
Tevosyan, Hovhannes K. H. [8773-45] SPS
Thaury, Cédric [8779-6] S2
Themistos, Christos [8775-19] S5
Thienpont, Hugo [8775-24] S6, [8781-25] S6
Thomas, Alexander G. R. [8779-22] S5, [8779-4] S1
Thomas, Heiko [8777-18] S5
Thompson, Mark G. [8781-36] S1
Thylén, Lars 8781 S4 Session Chair, 8781 S7 Session Chair, [8781-24] S6, [8781-51] S7
Tian, Xiao-ling [8780-20] S5, [8780-24] S6
Tibai, Zoltán [8779-71] S17
Tichý, Ivo [8774-14] S2
Tichy, Vladimir [8777-32] S10, [8777-35] S10, [8777-36] S10, [8777-43] S12, [8777-45] S12
Tiedtke, Kai [8777-2] S1, [8777-20] S6, 8778 Conference Chair, [8778-16] S3, [8778-35] SPS, [8778-39] SPS, [8778-42] SPS, [8778-44] SPS, [8778-7] S2
Tikhonchuk, Vladimir T. [8779-42] SPS, [8780-56] S11, [8780-67] S14, [8780-87] S14, [WS100-15] S3, [WS100-17] S3, [WS100-24] S4, [WS100-35] SPS, [WS100-36] SPS, [WS100-42] S4
Tikhova, Olesya [8772-61] SPS
Timneanu, Nicusor [8777-18] S5
Ting, Antonio C. [8779-1] S1
Tisa, Simone [8773-3] S1
Toci, Guido [8780-18] S5
Togashi, Tadashi [8778-14] S3, [8778-23] S5
Toleikis, Sven [8777-20] S6, [8777-51] S14, [8778-22] S5
Tolley, Martin K. [8780-81] S15, [WS100-27] S5, [WS100-31] S5
Tolstik, Elen [8776-5] S1
Tomanek, Pavel [8774-58] SPS
Tomashuk, Alexander L. [8774-2] S1
Tombelli, Sara [8774-22] S4
Tomita, Yasuo [8776-21] S5
Toncian, Toma [8779-30] S7
Tong, Hoang Tuan [8775-32] SPS
Tono, Kensuke [8777-16] S4, [8778-14] S3, [8778-23] S5
Töpfer, Thomas [8780-14] S4
Torii, Shuichi [8777-5] S2
Torres, Juan P. 8773 Program Committee, [8773-36] S6
Torres, Mauricio [8775-24] S6
Torrissi, Lorenzo L. [8779-37] SPS, [8779-63] S12
Tosa, Valer [8780-59] S12
Tosi, Alberto [8773-3] S1, [8773-34] S6
Tóth, György [8779-17] S4, [8779-71] S17
Touati, Mickael [WS100-15] S3, [WS100-17] S3, [WS100-24] S4

Toupin, Perrine [8775-2] S1
Trabattoni, Andrea [8778-38] SPS
Traina, Paolo [8773-34] S6
Traino, Claudio [8779-23] S6
Tramontana, A. [8779-63] S12
Treadwell, Paul A. 8780 S2 Session Chair, [8780-1] S1
Trejo-Durán, Mónica [8772-16] S4
Trines, Raoul M. G. M. [WS100-34] S3
Trofimov, Vyacheslav A. [8772-36] S9, [8772-37] S9, [8775-20] S5
Trolès, Johann [8775-2] S1
Trono, Cosimo [8774-22] S4, [8774-23] S4
Troussel, Philippe [8777-46] S13
Trull, Jose [8771-34] S8
Trykin, Evgeniy V. [8772-37] S9
Tsai, Din Ping [8771-43] SPS
Tsaknakis, George [8780-25] S7
Tsarev, Andrey [8781-37] SPS, [8781-4] S1
Tschentscher, Thomas [8777-16] S4, [8777-20] S6, 8778 Conference Chair, 8778 S1 Session Chair, [8780-61] S13
Tseng, Chih Wei [8781-8] S2
Tsygankova, Alphiya [8772-65] SPS
Tuan, Tong Hoang [8772-49] SPS
Tulkki, Jukka [8773-38] S6, [8773-46] S7
Tumkur, Thejaswi U. [8771-25] S6
Turcato, Monica [8778-29] S6
Turchetti, Giorgio [8779-57] S12
Turel, Matejka [8774-46] SPS
Turioni, F. [8774-59] SPS
Tyldesley, Michael [WS100-27] S5
Tzeremes, Georgios D. [8780-25] S7

U

Uesaka, Mitsuru [8779-35] S8
Ueta, Tsuyoshi [8771-17] S4
Ugolotti, Elena [8772-35] S8
Ullschmied, Jiri [8779-37] SPS, [WS100-22] S4
Ulmer, Melville P. 8777 Program Committee
Urbanczyk, Wacław [8774-6] S1, 8775 Program Committee, [8775-14] S4, [8775-25] S6
Ursescu, Daniel [8780-63] S13
Ursu, Ioan [8780-63] S13
Uryupina, Daria [8779-42] SPS
Uschmann, Ingo [8778-33] S6
Utzer, Olivier P. [8780-16] S4

V

Vaccari, Alessandro [8781-23] S5
Vacek, Michael [8773-21] SPS, [8773-8] S2
Vadimova, Olga L. [8780-6] S2
Vaisseau, Xavier [WS100-24] S4, [WS100-42] S4
Vala, Milan [8774-13] S2
Valentino, Massimo [8773-15] S4
Valle, Paula S. [8776-24] S6
Vallés, Gonzalo [WS100-26] S5
Vallet, Alexandra [WS100-35] SPS
Valvo, Giuseppina G. [8773-1] S1
Van Erps, Jürgen [8781-25] S6
van Exter, Martin P. [8773-37] S6
van Tilborg, Jeroen [8779-9] S2
Vanko, Gabriel [8777-56] S15

Vannini, Matteo [8780-18] S5
Vanwolleghem, Mathias [8781-19] S5
Varju, Katalin [8780-59] S12
Varnière, Françoise [8777-47] S13
Varriale, Antonio [8774-56] SPS
Vašinek, Michal [8777-11] S3
Vašinek, Vladimír [8774-41] SPS, [8774-42] SPS, [8774-44] SPS, [8774-54] SPS, [8774-63] SPS, [8774-66] SPS
Vaughan, Gavin [8778-46] SPS
Vauzour, Benjamin [WS100-24] S4, [WS100-42] S4
Vaz, Pedro [8774-30] S6
Vecseine Sandor, Nora K. [8773-42] S7
Vegni, Lucio [8774-36] SPS
Veis, Martin [8771-54] SPS
Velarde, Marta [WS100-26] S5
Velarde, Pedro [8772-23] S6
Velasco, Aitor V. [8781-6] S2
Velha, Philippe V. F. [8774-15] S2
Velotta, Raffaele [8774-19] S3
Velyhan, Andriy [8779-63] S12
Venediktov, Vladimir Yu 8776 Program Committee, [8776-16] S4
Verenikina, Nina M. [8776-28] SPS
Vermeulen, Nathalie [8781-25] S6
Vernon, Emerson [8773-11] S3
Versteegen, Maud [8779-62] S13
Victoria, Maximo [WS100-26] S5
Vidal-Dasilva, Manuela [8777-49] S13
Vieira, Jorge M. [8779-72] S17, [8779-8] S2, [8780-68] S14
Vieux, Gregory [8779-76] S19, [8779-78] S20
Vigon, Vadim G. [8773-19] SPS
Vilaseca, Ramon Alavedra [8771-34] S8
Villa, Federica A. [8773-3] S1
Villagomez, Balder A. [8772-45] SPS
Villette, Bruno [8777-46] S13
Viphavakit, Charusluk [8775-19] S5
Vitasek, Jan [8774-42] SPS, [8774-63] SPS, [8774-66] SPS
Vitek, Michal [8780-82] S15
Vivien, Laurent 8781 Program Committee, [8781-32] S8, [8781-7] S2
Vlad, Valentin I. 8772 S7 Session Chair, [8772-33] S8
Vollmer, Frank [8774-12] S2
Volpe, Luca [WS100-24] S4, [WS100-41] SPS
von der Goenna, Gordon 8780 S3 Session Chair, [8780-14] S4
Vozzi, Caterina [8778-11] S3
Vranic, Marja [8779-72] S17, [8780-68] S14
Vyšín, Ludek [8777-11] S3, [8777-20] S6

W

Wachulak, Przemysław W. 8776 Program Committee, [8777-44] S12, [8777-53] S14, [8777-7] S2
Wahl, Pierre [8781-25] S6
Wahlert, Frank [8778-51] SPS
Wahlström, Claes-Goran [WS100-12] S3
Walasik, Wiktor [8772-19] S5
Walze, Günther [8776-2] S1

Index of Authors, Chairs, and Committee Members

Bold = SPIE Member

Wan Abdullah, Wan Saffiey [8775-29] S6
Wan Hassan, Wan Muhamad Saridan [8772-41] S9
Wandt, Christoph [8780-17] S5
Wang, Cheng Yu [8781-8] S2
Wang, Chunhua [8779-39] SPS
Wang, Chunhua [8779-59] S12
Wang, Fei [8774-70] SPS, [8774-71] SPS
Wang, Feng-lin [8777-29] SPS
Wang, Jie [8773-44] S7
Wang, Junmin [8772-48] SPS, [8773-44] S7
Wang, Jyhpyng [8779-5] S1
Wang, Long [8775-15] S4
Wang, Qi [8781-22] S5
Wang, Qi [8774-45] SPS
Wang, Yuheng [8773-17] S4
Wang, Zhanshan 8777 S12
Session Chair, [8777-17] S5, [8777-50] S13
Wang, Zhen-guo [8780-20] S5
Wang, Zhiguo [8774-70] SPS, [8774-71] SPS
Wawro, Andrzej [8777-15] S4
Weaver, Matt [8778-27] S6
Webb, David J. 8775 Program Committee, [8775-27] S6
Webb, Stephen D. [8779-36] S8
Weber, Stefan [8779-77] S20
Wegener, Martin 8771 Program Committee
Wegner, U. [8777-51] S14
Wegner, Ulrike [8778-22] S5, [8778-26] S5
Wegrzecki, Maciej [8773-22] SPS
Wei, Mingsheng [WS100-24] S4, [WS100-42] S4
Weiser, Marc-Stephan [8776-2] S1
Weisleder, Andreas [8780-14] S4
Weisskopf, Martin C. [8777-31] S10
Wellman, John A. [8777-42] S12
Welsh, Gregor H. [8779-76] S19
Wen, Weijia [8774-47] SPS
Wenzl, Franz-Peter [8781-33] S8
Wernicke, Günther K. G. 8776 Program Committee
Wesch, S. [8778-21] S4
Wetter, Niklaus U. [8780-26] S7
White, Andrew G. [8773-30] S5
Widera, René [8780-53] S11
Wiggins, Mark 8779 Program Committee, [8779-43] SPS, [8779-76] S19
Wild, Jan [8777-11] S3
Wilkins, Jan J. [8779-56] S11
Willi, Oswald [8779-30] S7
Willingale, Louise [8779-22] S5
Willsch, Reinhardt 8774 Program Committee
Wilson, Richard D. [8771-38] S8, [8773-41] S7
Windt, David L. 8777 Program Committee
Winstone, Trevor B. [8780-2] S1, [8780-76] S15
Winter, David N. [8780-1] S1
Wirth, Allan [8780-21] S6
Witas, Karel [8774-63] SPS
Witzens, Jeremy [8781-30] S7
Witzmann, Bernd [8774-55] SPS
Wolinski, Tomasz R. [8774-4] S1
Wolowski, Jerzy [WS100-22] S4, [WS100-37] SPS

Wong, Alex CY [8774-38] SPS
Wong, M.M.K. [8774-38] SPS
Wong, Yew Hoong [8774-61] SPS
Wosinski, Lech 8781 Program Committee, [8781-24] S6, [8781-51] S7
Wöstmann, Michael [8778-51] SPS
Wróbel, Piotr [8771-19] S4, [8771-26] S6
Wu, David S. [8781-17] S4
Wu, Deng-sheng [8780-20] S5, [8780-24] S6
Wu, Jianfeng [8771-11] S3
Wu, Pin Chieh [8771-43] SPS
Wuilpart, Marc [8772-28] S7, [8774-2] S1
Wurtz, Gregory A. [8771-10] S3

X

Xiao, Guangzong [8774-70] SPS, [8774-71] SPS
Xu, Dan-Xia 8781 Program Committee, [8781-6] S2, [8781-7] S2

Y

Yabashi, Makina [8777-16] S4, [8777-23] S7, 8778 Program Committee, [8778-14] S3, [8778-23] S5
Yahia, Vincent [WS100-24] S4
Yahiaoui, Riad [8771-21] S5
Yakoboylu, Enderalp [8780-71] S14
Yakovlev, Ivan V. [8780-12] S3
Yakovlev, Yury P. [8781-18] S4
Yamamoto, Manabu [8776-20] S5, [8776-6] S2
Yamamoto, Naoki [8771-8] S2
Yamashita, Kenichi [8774-26] S5
Yamauchi, Kazuto [8778-14] S3
Yamauchi, Tomoya [8779-14] S4
Yan, M. [8778-21] S4
Yan, Xiong-wei [8780-20] S5
Yang, Baodong [8773-44] S7
Yang, Ge [8773-10] S3, [8773-11] S3
Yang, Sang Sik [8774-35] SPS
Yang, Xue [8779-76] S19
Yang, Zhiyong [8772-6] S2
Yanovsky, Victor P. [8779-22] S5
Yashchuk, Valeriy V. [8777-1] S1
Yashiro, Wataru [8778-14] S3
Yatagai, Toyohiko Meeting VIP
Yeom, Dong-Il [8772-35] S8
Yildirim, Remzi [8772-40] S9
Yin, Jie [8771-58] SPS, [8780-34] SPS
Yogo, Akifumi 8779 Program Committee, [8779-14] S4
Yoon, Hyun C. [8774-35] SPS
Yoon, Jungwon [8780-88] S16
Yorulmaz, S. Cigdem [8773-37] S6
Yoshida, Mitsuhiro [8779-35] S8
Yoshida, Shuhei [8776-20] S5, [8776-6] S2
Yu, Chin-Ping [8775-5] S1
Yu, Tae Jun [8779-12] S3, [8780-85] S16, [8780-88] S16

Yuan, Jie [8771-55] SPS, [8774-70] SPS
Yuan, Xiaohui [WS100-12] S3
Yuan, Yanyan [8777-17] S5
Yuce, Murat [8771-37] S8
Yulin, Alexey [8771-16] S6, [8772-20] S5
Yulin, Sergiy [8777-25] S7
Yumoto, Hirokatsu [8778-14] S3
Yunkin, Vyacheslav [8777-40] S11, [8777-41] S11, [8778-46] SPS
Yurkov, Mikhail V. [8778-2] S1, [8778-36] SPS, [8778-43] SPS, 8779 S20 Session Chair, [8779-67] S16, [8779-68] S16, [8779-69] S16
Yusoff, Zulfadzli [8775-29] S6

Z

Zabrodsky, Vladimir [8777-27] SPS
Zacharias, Helmut [8777-14] S4, [8778-51] SPS
Zagoskin, Alexandre M. [8771-38] S8
Zaija, Beata [8777-8] S3
Zainal Abidin, Abdul Rashid [8772-60] SPS
Zainal Abidin, Mohd Nasir [8772-60] SPS
Zajnulina, Marina [8775-11] S3
Zakharova, Irina G. [8775-20] S5
Zaltron, Anna Maria [8772-18] S5
Zamfir, Nicolae V. [8780-63] S13
Zamfir, Victor 8779 Program Committee
Zanchetta, Carlo [8778-11] S3
Zangrando, Marco 8778 Program Committee, 8778 S6 Session Chair, [8778-32] S6, [8778-40] SPS
Zani, Alessandro [8779-20] S5
Zatko, Bohumír [8777-56] S15
Zayats, Anatoly V. 8771 S5
Session Chair, [8771-10] S3
Zegrya, Georgy G. [8781-18] S4
Zeiger, Benjamin R. [8777-32] S10
Zeil, Karl [8779-13] S3, [8779-19] S5, [8779-54] S11
Zeitler, Benno [8779-3] S1
Zeitoun, Philippe [8772-23] S6, 8777 Program Committee, 8778 Program Committee
Zelenska, Katerina S. [8772-63] SPS
Zelensky, Sergiy E. [8772-63] SPS
Zeleny, Richard [8775-22] S5, [8775-34] SPS
Zelinger, Zdenek [8777-11] S3
Zeng, Xiaoyan [8780-34] SPS
Zepf, Matthew 8779 Program Committee, [8779-52] S10, 8780 Program Committee, 8780 S13
Session Chair, [8780-58] S12
Zghal, Mourad [8772-12] S2, [8775-4] S1
Zhang, Haifeng [8773-13] S3
Zhang, Jianguo [8777-19] S6, [8778-30] S6
Zhang, Jun [8780-24] S6
Zhang, Jun [8780-20] S5
Zhang, Shuang Meeting VIP

Zhang, William W. 8777 Program Committee
Zhang, Xiong-jun [8780-20] S5, [8780-24] S6
Zhang, Xueyan [8777-47] S13
Zhang, Ya-Nan [8781-22] S5
Zhang, Zhong [8777-50] S13
Zhang, Zhongping [8773-13] S3
Zhang, Ziyang [8781-3] S1
Zhao, Yong [8774-45] SPS, [8781-22] S5
Zhelezov, Dmitry Sergeevich [8780-8] S2
Zhelitikov, Alexei M. 8772
Conference Chair, 8775 Program Committee
Zheludev, Nikolay I. 8771 Program Committee
Zheng, Jian-gang [8780-20] S5, [8780-24] S6
Zheng, Kuixing [8780-24] S6
Zheng, Wenjun [8772-39] S9
Zherdev, Alexander Y [8776-11] S3, [8776-28] SPS, [8776-8] S2
Zhidkov, Alexei G. [8780-51] S11
Zhong, Frank C. [8781-30] S7
Zhong, Qi [8777-50] S13
Zhu, Diling [8778-22] S5, [8778-27] S6
Zhu, Haihong [8771-58] SPS, [8780-34] SPS
Zhu, Jingtao [8777-17] S5, [8777-50] S13
Zhu, Qi-hua [8780-20] S5
Zhukov, Alexey E. [8772-31] S7
Zhuo, Zhong Chang [8772-10] S2
Zhurkov, S. A. [8772-56] SPS
Zhuromskyy, Oleksandr [8771-23] S5
Ziaja-Motyka, Beata 8777 Program Committee, [8777-51] S14, [8778-22] S5
Zicha, Josef [8781-38] SPS
Ziegler, Wolfgang [8779-75] S19
Zigler, Arie [8779-60] S13
Zikova, Maria [8781-18] S4
Ziolkowski, Richard W. 8771
Program Committee
Zito, Gianluigi [8774-10] S2, [8774-9] S2
Zlobina, Ekaterina A. [8772-29] S7
Zlobinskaya, Olga [8779-56] S11
Zlokazov, Evgeny Yu [8776-11] S3, [8776-28] SPS
Zolotovskiy, Igor O. [8774-2] S1
Zulick, Calvin A. [8779-22] S5
Zwiler, Valery 8773 Program Committee, 8773 S3 Session Chair, [8773-14] S4, [8773-16] S4

Registration

Onsite Registration and Badge Pick-Up Hours

Conference Foyer, 2nd Floor Clarion Congress Hotel

Sunday 14 April	16:00 to 18:00 hrs.
Monday 15 April	07:45 to 17:00 hrs.
Tuesday 16 April	08:00 to 17:00 hrs.
Wednesday 17 April	08:00 to 17:00 hrs.
Thursday 18 April	08:30 to 16:00 hrs.

Conference Registration

Includes admission to all conference sessions, plenaries, panels, and poster sessions, admission to the Exhibition, Welcome Reception, coffee breaks, and a choice of proceedings. Student pricing does not include proceedings.

Exhibition Registration

Tuesday 16 April	10:00 to 17:00 hrs.
Wednesday 17 April	10:00 to 16:00 hrs.

Exhibition-Only visitor registration is complimentary.

SPIE Member, SPIE Student Member, and Student Pricing

- SPIE Members receive conference registration discounts. Discounts are applied at the time of registration.
- Student registration rates are available only to undergraduate and graduate students who are enrolled full time and have not yet received their Ph.D. Post-docs may not register as students. A student ID number or proof of student status is required with your registration.

Press Registration

For credentialed press and media representatives only. Please email contact information, title, and organization to media@spie.org.

SPIE Cashier

Registration Area

Open during registration hours

- **Registration Payments**
If you are paying by cash or cheque as part of your onsite registration, wish to add a course, workshop, or special event requiring payment, or have questions regarding your registration, visit the SPIE Cashier.
- **Receipts and Certificate of Attendance**
Preregistered attendees who did not receive a receipt or attendees who need a Certificate of Attendance may obtain those from the SPIE Cashier.
- **Badge Corrections**
Badge corrections can be made by the SPIE Cashier. Please have your badge removed from the badge holder and marked with your changes before approaching the counter.

Refund Information

There is a 35 EU service charge for processing refunds. Requests for refunds must be received by **8 April 2013**; all registration fees will be forfeited after this date. Membership dues, reception tickets, and SPIE Digital Library subscriptions are not refundable.

Attendee Services

Internet

There will be free Internet available for attendees. Speeds may vary depending on the number of simultaneous users.

SPIE Conference App

Download the free SPIE Conference App, available for iPhone and Android smart phones. Search and browse the programme, special events, participants, exhibitors, and more.

SPIE Publications

Browse the latest SPIE Press Books and Proceedings.

SPIE Luggage + Coat Check

Luggage, package, and coat storage facilities are with the hotel downstairs from the conference centre.

Urgent Message Line

Messages for attendees can be left by calling the Clarion Hotel and Congress Centre and asking for the Conference Partners Conference and Registration Desk. Messages will be taking during registration hours Monday-Thursday. It is the attendees' responsibility to check the message boards on a daily basis.

Author/Presenter Information

Speaker Check-In and Preview Station

All conference rooms have a computer workstation, projector, screen, lapel microphone, and laser pointer. All presenters are requested to come to their conference room during the breaks with their memory devices or laptops to confirm their presentation display settings.

Interactive Poster Session:

Wednesday 17 April 17:40 to 19:15 hrs.

Poster presenters can begin to post their papers at 10:00 hrs. on Wednesday. Each poster presenter is provided a space 0.95 x 1.20m in which to display a summary of the paper. Poster presenters will stand by their posters from 17:30 to 19:00 hrs. to answer questions. Poster presenters who have not set up by 17:30 hrs. on Wednesday will be considered a "no show" and their manuscript will not be published. Posters must be removed at the end of the poster session since the poster boards will then be removed and the remaining posters discarded. SPIE assumes no responsibility for posters left up after the end of each poster session.

General Information

Food + Beverage Services

Coffee Breaks

Monday and Thursday: Meridian Hall

Tuesday and Wednesday: Exhibition Hall

Coffee will be served during the appropriate breaks. For exact times and location please check the programme of your conference.

Welcome Reception

Monday 15 April, 18:30 to 20:30

All attendees are invited to relax, socialise, and enjoy light refreshments. Please remember to wear your conference registration badges. Dress is casual.

Directions - Two Options:

1. Take metro B from VYSOCANSKA (station is located just at the Clarion Congress Hotel) and go eight stops to NARODNI TRIDA. There change for tram No. 22 and go to the station BREVNOVSKY KLASTER:
Time required: 45 minutes
2. Take metro B from the station VYSOCANSKA (station is located just at the Clarion Congress Hotel), go two stops to Palmovka. There change for tram No. 25 and go to the station BREVNOVSKY KLASTER.
Time required: 42 minutes

Travel to Prague

All applicable travel links can be found at www.spie.org/travel

Czech Airlines is the national carrier operating from many European and some international destinations to Prague. There are also many inexpensive direct flights operated by budget airlines such as EasyJet, Ryanair, SmartWings, Air Lingus, or Sky Europe. Further information on destinations can be found on the airport's website. For alternative travel, Prague is also connected by rail to a number of European cities.

Prague Airport www.prg.aero/en

Public Transport

Prague has a network of public transport routes including bus, tram and metro links. For further information on the network, please visit the website of the Prague Public Transport Company. <http://dpp.cz/en>

Travel to Venue

By Bus

The majority of travel links in the city terminate at the Florenc station, which is about 15 minutes away from the Clarion by metro. Board the metro at the Florenc station and get off at the Vysočanská stop (metro line B). (Fifth stop from Florenc). The Clarion Congress Hotel is located right atop Vysočanská stop. (Czech pronunciation: [ˈvɪsotchanskaː])

By Train

Having once arrived at the Prague Main Railway Station (Hlavní Nádraží), take the metro from the Hlavní Nádraží stop running in the direction of Letňany (metro line C), travel one stop to Florenc and then transfer to metro line B in the direction of Černý Most. Get off at the Vysočanská stop (fifth stop from Florenc). The Clarion Congress Hotel is located right atop the stop. For further information on the train network, please visit: <http://jizdnirady.idnes.cz/vlaky/spojeni>

Public Transport

For using public transportation from the Vaclav Havel International Airport in Prague (formerly known as the Ruzyne Airport) to the Clarion Congress Hotel Prague, please take bus number 100 located in front of the airport terminal directly to metro station Zličín (B line terminus), and then continue by metro to Vysočanská station. Clarion Congress Hote is located directly atop the Vysočanská metro station. A shopping centre is adjacent to the hotel. Public transport tickets can be purchased from vending machines installed in Prague Airport or tobacco shops. Single journey public transport ticket (basic 90-minute fare) costs CZK 32,-. Other ticket options are also available depending on your travel needs.

Parking

The venue has ample car parking facilities. Please follow the link on the Clarion Congress Hotel web site for more contact, travel directions and details.

Policies

Granting Attendee Registration and Admission

SPIE, or their officially designated event management, in their sole discretion, reserves the right to accept or decline an individual's registration for an event. Further, SPIE, or event management, reserves the right to prohibit entry or remove any individual whether registered or not, be they attendees, exhibitors, representatives, or vendors, who in their sole opinion are not, or whose conduct is not, in keeping with the character and purpose of the event. Without limiting the foregoing, SPIE and event management reserve the right to remove or refuse entry to any attendee, exhibitor, representative, or vendor who has registered or gained access under false pretenses, provided false information, or for any other reason whatsoever that they deem is cause under the circumstances.

Misconduct Policy

SPIE is a professional, not-for-profit society committed to providing valuable conference and exhibition experiences. SPIE is dedicated to equal opportunity and treatment for all its members and meeting attendees. Attendees are expected to be respectful to other attendees, SPIE staff, and contractors. Harassment and other misconduct will not be tolerated; violators will be asked to leave the event.

Identification

To verify registered participants and provide a measure of security, SPIE will ask attendees to present a government-issued Photo ID at registration to collect registration materials.

Individuals are not allowed to pick up badges for attendees other than themselves. Further, attendees may not have some other person participate in their place at any conference-related activity. Such other individuals will be required to register on their own behalf to participate.

Capture and Use of a Person's Image

By registering for this event, I grant full permission to SPIE to capture, store, use, and/or reproduce my image or likeness by any audio and/or visual recording technique (including electronic/digital photographs or videos), and create derivative works of these images and recordings in any SPIE media now known or later developed, for any legitimate SPIE marketing or promotional purpose.

By registering for this event, I waive any right to inspect or approve the use of the images or recordings or of any written copy. I also waive any right to royalties or other compensation arising from or related to the use of the images, recordings, or materials. By registering, I release, defend, indemnify and hold harmless SPIE from and against any claims, damages or liability arising from or related to the use of the images, recordings or materials, including but not limited to claims of defamation, invasion of privacy, or rights of publicity or copyright infringement, or any misuse, distortion, blurring, alteration, optical illusion or use in composite form that may occur or be produced in taking, processing, reduction or production of the finished product, its publication or distribution.

Payment Method

Registrants for paid elements of the event, who do not provide a method of payment, will not be able to complete their registration. Individuals with incomplete registrations will not be able to attend the conference until payment has been made. SPIE accepts VISA, MasterCard, American Express, Discover, Diner's Club, checks and wire transfers. Onsite registrations can also pay with Cash.

Authors/Coauthors

By submitting an abstract, you agree to the following conditions:

- An author or coauthor (including keynote, invited, and solicited speakers) will register at the author registration rate, attend the meeting, and make the presentation as scheduled.
- A full-length manuscript (6-12 pages) for any accepted oral or poster presentation will be submitted for publication in the SPIE Digital Library, printed conference Proceedings, and CD. (Some SPIE events have other requirements that the author is made aware of at the time of submission.)
- Only papers presented at the conference and received according to publication guidelines and timelines will be published in the conference Proceedings and SPIE Digital Library (or via the requirements of that event).

Audio, Video, Digital Recording Policy

Conferences, courses, and poster sessions: For copyright reasons, recordings of any kind are prohibited without prior written consent of the presenter or instructor. Attendees may not capture or use the materials presented in any meeting/course room, or in course notes on display without written permission. Consent forms for material presented in meeting rooms are available at Speaker Check-In. Individuals not complying with this policy will be asked to leave a given session and/or asked to surrender their recording media.

Exhibition Hall: For security and courtesy reasons, recordings of any kind are prohibited unless one has explicit permission from on-site company representatives. Individuals not complying with this policy will be asked to surrender their recording media and to leave the exhibition hall.

Your registration signifies your agreement to be photographed or videotaped by SPIE in the course of normal business. Such photos and video may be used in SPIE marketing materials or other SPIE promotional items.

Laser Pointer Safety Information/Policy

SPIE supplies tested and safety-approved laser pointers for all conference meeting rooms. For safety reasons, SPIE requests that presenters use provided laser pointers.

Use of a personal laser pointer represents user's acceptance of liability for use of a non-SPIE-supplied laser pointer. If you choose to use your own laser pointer, it must be tested to ensure <5 mW power output. Laser pointers in Class II and IIIa (<5 mW) are eye safe if power output is correct, but output must be verified because manufacturer labeling may not match actual output. Come to Speaker Check-In and test your laser pointer on our power meter. You are required to sign a waiver releasing SPIE of any liability for use of potentially non-safe, personal laser pointers. Misuse of any laser pointer can lead to eye damage.

Access to Technical and Networking Events

Persons under the age of 18 are not allowed in technical or networking events. Anyone 18 or older must register as an attendee. All technical and networking events require a valid conference badge for admission.

Underage Persons on Exhibition Floor Policy

For safety and insurance reasons, no one under the age of 16 will be allowed in the exhibition area during move-in and move-out. During open exhibition hours, only children over the age of 12 accompanied by an adult will be allowed in the exhibition area.

Unauthorized Solicitation Policy

Unauthorized solicitation in the Exhibition Hall is prohibited. Any non-exhibiting manufacturer or supplier observed to be distributing information or soliciting business in the aisles, or in another company's booth, will be asked to leave immediately.

Unsecured Items Policy

Personal belongings should not be left unattended in meeting rooms or public areas. Unattended items are subject to removal by security. SPIE is not responsible for items left unattended.

Wireless Internet Service Policy

At SPIE events where wireless is included with your registration, SPIE provides wireless access for attendees during the conference and exhibition but cannot guarantee full coverage in all locations, all of the time. Please be respectful of your time and usage so that all attendees are able to access the internet.

Excessive usage (e.g., streaming video, gaming, multiple devices) reduces bandwidth and increases cost for all attendees. No routers may be attached to the network. Properly secure your computer before accessing the public wireless network. Failure to do so may allow unauthorized access to your laptop as well as potentially introduce viruses to your computer and/or presentation. SPIE is not responsible for computer viruses or other computer damage.

General Information

Policies continued

Mobile Phones and Related Devices Policy

Mobile phones, tablets, laptops, pagers, and any similar electronic devices should be silenced during conference sessions. Please exit the conference room before answering or beginning a phone conversation.

Smoking

For the health and consideration of all attendees, smoking is not permitted at any event elements, such as but not limited to: plenaries, conferences, workshops, courses, poster sessions, hosted meal functions, receptions, and in the exhibit hall. Most facilities also prohibit smoking in all or specific areas. Attendees should obey any signs preventing or authorizing smoking in specified locations.

Hold Harmless


Attendee agrees to release and hold harmless SPIE from any and all claims, demands, and causes of action arising out of or relating to your participation in the event you are registering to participate in and use of any associated facilities or hotels.

Event Cancellation

If for some unforeseen reason SPIE should have to cancel the event, registration fees processed will be refunded to registrants. Registrants will be responsible for cancellation of travel arrangements or housing reservations and the applicable fees.


Confidential Reporting of Unethical or Inappropriate Behavior

SPIE is an organization with strong values of responsibility and integrity. Our Ethics Statement and Code of Professional Conduct contain general guidelines for conducting business with the highest standards of ethics. SPIE has established a confidential reporting system for staff & other stakeholders to raise concerns about possible unethical or inappropriate behavior within our community. Complaints may be filed by phone or through the website, and, if preferred, may be made anonymously. The web address is www.SPIE.ethicspoint.com and the toll free hotline number is 1-888-818-6898.



PROCEEDINGS AND SEARCHABLE CDs OF SPIE

Vol#	Title/Editor	Prepublication Price
8771	Metamaterials VIII €60 <i>(Szoplik, Markos, Kuzmiak)</i>	€60
8772	Nonlinear Optics and Applications VII €68 <i>(Bertolotti, Haus, Zheltikov)</i>	€68
8773	Photon Counting Applications IV; and Quantum Optics and Quantum Information Transfer and Processing €55 <i>(Sobolewski, Prochazka, Fiurásek)</i>	€55
8774	Optical Sensors 2013 €75 <i>(Lieberman, Homola, Baldini)</i>	€75
8775	Micro-structured and Specialty Optical Fibres II €45 <i>(Mendez, Kanka, Kall)</i>	€45
8776	Holography: Advances and Modern Trends III €40 <i>(Hrabovský, Sheridan, Fimia-Gil)</i>	€40
8777	Damage to VUV, EUV, and X-ray Optics III; and EUV and X-ray Optics: Synergy between Laboratory and Space III €60 <i>(London, Bajt, Juha, Hudec, Pina)</i>	€60
8778	Advances in X-ray Free-Electron Lasers II: Instrumentation ... €60 <i>(Tschantcher, Tiedtke)</i>	€60
8779	Laser Acceleration of Electrons, Protons, and Ions II; and Medical Applications of Laser-Generated Beams of Particles II; and Harnessing Relativistic Plasma Waves III €75 <i>(Esarey, Leemans, Schroeder, McKenna, Ledingham, Spohr, Bolton, Jaroszynski)</i>	€75
8780	High-Power, High-Energy, and High-Intensity Laser Technology; and Research Using Extreme Light: Entering New Frontiers with Petawatt-Class Lasers €80 <i>(Hein, Silva, Korn)</i>	€80
8781	Integrated Optics: Physics and Simulations €60 <i>(Cheben, Ctyroky, Molina-Fernandez)</i>	€60
CDS515 Optics and Optoelectronics 2013 (Includes Vols. 8771-8781)		



PRINTED PROCEEDINGS VOLUMES.

If you are only interested in editor-reviewed papers from a single conference or want an archive of the conference that includes your paper, choose the printed book. Available 6 weeks after the meeting.

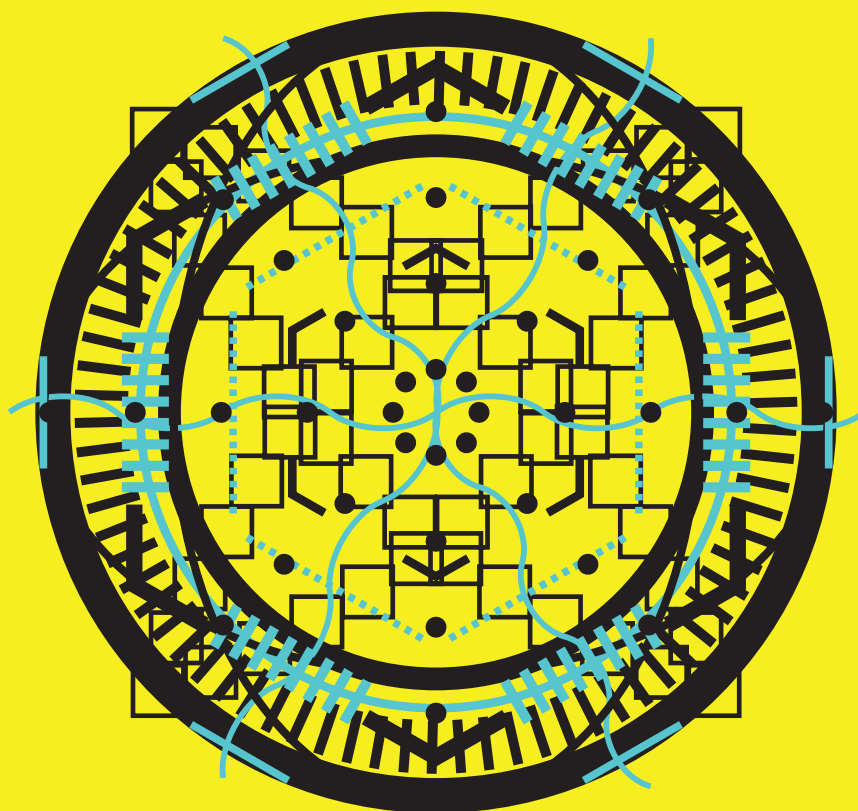
SEARCHABLE CDs WITH MULTIPLE CONFERENCES.

If you are interested in editor-reviewed papers from multiple conferences and a broad topical area, choose the searchable CDs. Available within 8 weeks of the meeting; PC, Macintosh, and Unix compatible.

SPIE Optics and Optoelectronics 2013
(Includes Vols. 8771-8781)

Order No. CDS515 • Est. pub. June 2013

Meeting attendee: €110
Nonattendee member price: €475
Nonattendee nonmember price: €625



Helping engineers and
scientists stay current
and competitive



Optics &
Astronomy



Biomedical
Optics



Optoelectronics &
Communications



Defense
& Security



Energy



Lasers



Nano/Micro
Technologies



Sensors

SPIE
Digital
Library

Find the answer
SPIDigitalLibrary.org

2014 Photonics Europe

Advances in applications of photonics, optics, lasers,
and micro/nanotechnologies

Mark Your Calendar

spie.org/pe2014

Conferences and Courses

13-17 April 2014

Exhibition

14-16 April 2014

Location

Square Brussels Meeting Centre

Brussels, Belgium