



## Quantum Technologies 2024 (PE104)

**Conference Chairs:** **Florent Baboux**, Lab. Matériaux et Phénomènes Quantiques (France); **Virginia D'Auria**, Institut de Physique de Nice (France); **Tom Bienaimé**, Univ. de Strasbourg (France)

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Quantum technologies exploit the ability to prepare, manipulate and detect single quantum objects such as atoms, photons and electrons to enhance the performance of applications in quantum communications, quantum computing and simulation, and quantum sensing/metrology. In the last decades impressive progress has been made in a large variety of physical systems providing an excellent experimental test bench for novel concepts introduced within the framework of quantum information science theory, and opening the path to new devices for advanced quantum technologies.

The aim of this conference on quantum technologies is to bring together people from academia and industry who are active in this field or have an interest in new emerging areas. We appreciate contributions ranging from basic research on quantum components and systems to indus

- The conference program will consist of oral and poster presentations on topics that include, but are not limited to:
- quantum cryptography and communication
- quantum simulation and computing (hardware and software)
- quantum sensing/imaging/metrology (e.g. atomic clocks, quantum enhanced measurements using entangled or correlated light, novel applications)
- novel quantum platforms and hybrid devices (based on atoms, ions, molecules, impurities, optical, mechanical, semiconductor and other solid-state systems, integrated photonics circuits and devices)
- quantum technology-based instruments and their applications
- quantum components and their applications (such as single-photon sources, entangled light sources, quantum memories, photon detectors, random number generators, etc.)

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### Present your research at SPIE Photonics Europe

Below are abstract submission instructions, the accompanying submission agreement, conference presentation guidelines, and guidelines for publishing in the Proceedings of SPIE on the SPIE Digital Library. Submissions subject to chair approval.

#### Important dates

Abstracts due	30 November 2023
Authors notified and programme posts online	25 January 2024
Registration opens	8 January 2024
Submission system opens for manuscripts and poster videos/PDFs*	5 February 2024
Manuscripts due	20 March 2024

\*Contact author or speaker must register prior to uploading

#### What you will need to submit

- Presentation title
- Author(s) information
- Speaker biography (1000-character max including spaces)
- Abstract for technical review (200-300 words; text only)
- Summary of abstract for display in the programme (50-150 words; text only)
- Keywords used in search for your paper (optional)
- Check the individual conference call for papers for additional requirements (i.e. extended abstract PDF upload for review or instructions for award competitions)

Note: Only original material should be submitted. Commercial papers, papers with no new research/development content, and papers with proprietary restrictions will not be accepted for presentation.

#### How to submit your abstract

- Visit the conference page: [www.spie.org/pe104call](http://www.spie.org/pe104call)
- You may submit more than one abstract, but submit each abstract only once
- Submit by clicking the "Submit an Abstract" button on the conference page
- Sign in to your SPIE account, or create an account if you do not already have one
- Follow the steps in the submission wizard until the submission process is completed
- If your submission is related to an application track below, indicate the appropriate track when prompted during the submission process

#### Submission agreement

All presenting authors, including keynote, invited, oral, and poster presenters, agree to the following conditions by submitting an abstract:

- Register and pay the author registration fee
- Oral presenters: recording and publication of your onsite presentation (slides synched with voice) for publication in the Proceedings of SPIE in the SPIE Digital Library
- Poster presenters: submit a poster PDF by the advertised due dates for publication in the Proceedings of SPIE in the SPIE Digital Library; poster PDFs may also be published and viewable in the spie.org programme during and immediately after the event. Each poster must have a unique presenter; one person may not present more than one poster
- Email messaging for the conference series
- Submit a manuscript by the advertised due date for publication in the Proceedings of SPIE in the SPIE Digital Library
- Obtain funding for registration fees, travel, and accommodations
- Attend the meeting
- Present at the scheduled time

#### Review and programme placement

- To ensure a high-quality conference, all submissions will be assessed by the conference chair/editor for technical merit and suitability of content
- Conference chairs/editors reserve the right to reject for presentation any paper that does not meet content or presentation expectations
- Final placement in an oral or poster session is subject to chair discretion

#### Publication of Proceedings in the SPIE Digital Library

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- Only manuscripts, presentations, and posters presented at the conference and received according to publication guidelines and due dates will be published in the Proceedings of SPIE in the SPIE Digital Library
- Manuscripts, presentations, and posters will be officially published after the event in the SPIE Digital Library
- Conference chairs/editors may require revision before approving publication and reserve the right to reject for publication any manuscript or presentation that does not meet acceptable standards for a scientific publication
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