

First International Conference on Advances in Quantum Technologies and Information (AQTI' 2027)

3-5 May 2027

Geneva, Switzerland



CALL FOR PAPERS

The 1st International Conference on Advances in Quantum Technologies and Information (AQTI' 2027) brings together researchers, engineers, industry professionals, and academic experts working in quantum science, quantum information, and emerging quantum technologies. The conference provides an interdisciplinary forum for presenting new ideas, experimental results, theoretical approaches, and technological solutions for next-generation quantum systems and applications.

Special emphasis will be placed on quantum optics and photonics, including quantum communication, networking, photonic quantum computing, integrated photonics, and optical technologies for generating, manipulating, and measuring quantum states.

AQTI' 2027 will be held jointly with the 10th International Conference on Optics, Photonics and Lasers (OPAL' 2027). Both events are organized by IFSA, a professional non-profit association serving academia and industry since 1999.

Topics of Interest include but not limited to:

1. Quantum Information

- Qubits and Multi-Qubit Systems
- Quantum Entanglement
- Quantum Channels
- Quantum Information Theory
- Quantum Error Correction

2. Quantum Computing

- Quantum Logic Gates
- Quantum Algorithms
- Quantum Simulations
- Quantum Processor Architectures
- Decoherence Suppression
- Fault-Tolerant Quantum Computing

3. Quantum Communications

- Quantum Cryptography
- Secure Quantum Networks
- Quantum Repeaters
- Photonic Communication Channels
- Satellite Quantum Communication
- Quantum Teleportation

4. Quantum Sensors and Metrology

- Atomic Clocks
- Quantum Gyroscopes
- Magnetometers
- Gravimeters
- Interferometric Measurements
- Ultrasensitive Optical and Atomic Sensors

5. Quantum Materials and Devices

- Superconducting Structures
- Semiconductor Quantum Dots
- Color Centers in Diamond
- Ion Traps
- Two-Dimensional Materials
- Nano- and Cryogenic Devices for Quantum State Control

6. Quantum Optics and Quantum Photonics

- Single Photons
- Nonclassical Light
- Squeezed States
- Entangled Photon Sources
- Photonic Integrated Circuits
- Light Interaction with Atoms, Ions, Quantum Dots, and Resonators

7. Quantum Optomechanical Systems

- Cavity Quantum Optomechanics
- Levitated Quantum Optomechanics
- Optomechanical Crystals and Integrated Nano-Optomechanical Systems
- Microwave-to-Optical Quantum Transduction
- Quantum Control and Measurement of Mechanical Motion
- Hybrid and Distributed Optomechanical Systems

Contribution Types

- Keynote and Invited Presentations
- Industrial Presentations
- Regular and Poster Sessions
- Special Sessions
- Panel Discussions and Round Tables
- Virtual Sessions in Zoom (on demand)
- Exhibition

Deadlines:

Submission
(2-page abstract):
15 February 2027

Notification of acceptance:
15 March 2027

Registration:
30 March 2027

Camera ready
(4-6 pages paper):
5 April 2027



<https://www.aqti-conference.com/>

aqti@sensorsportal.com





Venue

The AQTI' 2027 Conference will take place in the modern 4-star Crowne Plaza hotel, situated two minutes from Geneva International Airport and the Palexpo Exhibition Centre. Surrounded by lush greenery, it offers easy access to the city without sacrificing the welcoming ambiance of our natural setting. With a free airport shuttle and complimentary public transport passes, exploring top attractions is effortless. In less than 15 minutes, discover Geneva's charming Old Town, the Lakeside Promenade, and the iconic Jet d'Eau. Address: Av. Louis-Casaï 75/77, 1216 Genève, Switzerland.

Special Sessions:

Authors are welcome to propose and manage special sessions during the AQTI' 2027. Each special session will contain 4-6 papers in a related field as specified above.

Session organizers will get:

- Certificate of Appreciation;
- Free Registration

One event - three different publications !

1) All registered abstracts will be published in the conference proceedings in the Acrobat (pdf) format with the ISBN and DOI, distributed during the conference and submitted for indexing to the Web of Science and SCOPUS.

2) Authors will be invited to submit full-page extended papers to the one of the following special issues of open access journals:

- *Sensors & Transducers* open access journal (ISSN: 2306-8515, e-ISSN: 1726-5479), Special Issue on '*Quantum Sensors, Devices and Metrology*'. The journal is indexed in SCOPUS.

- *MDPI Quantum Beam Science* (ISSN 2412-382X, IF 1.7, CiteScore 2.8) open access journal, Special Issue on '*Advances in Quantum Beams, Photonic Sources and Laser-Driven Systems*'. The journal is indexed in ESCI and SCOPUS.

3) The limited number of full-page papers published in the journals will be selected by the Editorial Board to extend for book chapters for the open access Book Series on '*Advances in Quantum Technologies and Information*', Vol. 1.



Organizing Committee

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Prof., Dr. Sergey Y. Yurish (*IFSA, Spain*)

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