

ICTON 2025

Workshop on

Quantum communications, processing, applications and ecosystem: results of the PC3 program.

In conjunction with ICTON
25th International Conference on Transparent Optical Networks,
Barcelona, Spain, July 6-10, 2025
Technical co-sponsorship by the IEEE Photonics Society
<https://www.gov.pl/web/instytut-lacznosci/icton-2025>

Scope of the workshop:

Over the past two decades, quantum information communication and processing technologies have advanced rapidly. In the case of quantum communication, techniques such as Quantum Key Distribution (QKD) and other quantum cryptographic methods have driven the field toward near-commercial maturity. Quantum processing, while still facing present and future challenges, holds a large potential for further development. In both areas, R&D must contribute to new training initiatives and support a flexible yet robust industrial ecosystem.

This workshop aims to present the results achieved in the Plan Complementario de Comunicaciones Cuánticas (PC3) program, which aligns with key European initiatives such as the Quantum Flagship and the European Quantum Communications Infrastructure (EuroQCI), fosters cutting-edge infrastructure and serves as a catalyst for the quantum industry.

The workshop will focus on the following key areas:

- 1: EuroQCI - towards a European quantum communications infrastructure.
- 2: Hardware for quantum communications.
- 3: Software for quantum communications.
- 4: Hardware for quantum processing.
- 5: Software for quantum processing.
- 6: Human resources and training for innovation and entrepreneurship.

Organizers:

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Paper submission:

If interested to contribute, please contact Workshop's organisers.