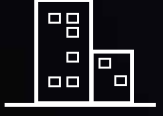


Harnessing Quantum Light Sources: from Fundamentals to Emerging Technologies



13 November 2025



Aula Barone
Via Campi Flegrei 34, Pozzuoli (Naples)



Workshop Chair
Maria Parisi (CNR-INO)

The workshop brings together leading experts in the field of quantum optics to explore the latest developments in light generation, manipulation, and application.

Set in the stimulating scientific environment of the CNR campus in Pozzuoli, the workshop offers a unique opportunity to foster collaborations among researchers and industry stakeholders interested in the rapidly evolving landscape of quantum photonics.

Institutional greetings

14:30-14:40 Maria Parisi (CNR-INO) – PI SMART_Q_ET project

14:40-14:45 Antigone Marino (CNR-ISASI) – President IEEE Photonics Society Italy Chapter

Chair Rosario De Rosa (Federico II University of Naples)

14:45-15:30 Mikhail Korobko (Universität Hamburg)

Taming photons: how to create and use quantum squeezed states of light

15:30-15:50 Martina De Laurentis (Federico II University of Naples)

Quantum Noise Reduction System in the Gravitational Waves Interferometrical Detectors AdV+

15:50-16:00 Verónica Vicuña-Hernández (CNR-INO)

Deterministic detector of orbital angular momentum

16:00-16:20 Coffee Break and photo

Chair Antigone Marino (CNR-ISASI)

16:20-17:00 Tommaso Calarco (Forschungszentrum Jülich, University of Bologna)

Juggling atoms with light: quantum control for quantum technologies

17:00-17:20 Alessandro Zavatta (QTI srl)

Quantum Networks for Secure Communications

17:20-17:40 Daniela Salvoni (Photon Technology Italy)

SNSPDs for Single Photon Sources Characterization

17:40-18:00 Axel Schönbeck (Noisy Labs)

Working with squeezed light – best practices and examples

18:00-18:10 Conclusion

With the support of



Celebrating the



Scientific and Organizing Committee:

Antigone Marino (CNR-ISASI), Simona Mosca (CNR-INO), Maria Parisi (CNR-INO), Verónica Vicuña-Hernández (CNR-INO), Martina De Laurentis (UNINA), Rosario De Rosa (UNINA), Valeria Sequino (UNINA)



https://lightmanipulation.ino.cnr.it/smartqet_workshop

