

# Beyond PNRR. Connecting in the new R&D Ecosystem

scientific programme  
15<sup>th</sup>-16<sup>th</sup> December 2025

**December 15<sup>th</sup>, 2025**

**12:00-13.30** Welcome, registration and LIGHT LUNCH

**13:30-13:40** Opening and Institutional greetings

**13:40-14:00** Highlights on **Cold matter and quantum simulation**

*Angular momentum of rotating fermionic superfluids by Sagnac phonon interferometry*

**Marcia Frómeta Fernández**, CNR-INO Sesto FI

**14:00-14:20** Highlights on **Extreme light and matter**

*Toward novel approaches to radiotherapy using laser-driven relativistic electron accelerators*

**Gabriele Bandini**, CNR-INO Pisa

**14:20-15:40** Round table on **PNRR European and Italian strategies for the future of the research**

*From PNRR research networks to EU Missions: opportunities, synergies, and long-term vision*

A discussion on how national priorities and PNRR-supported research networks align with EU Missions, highlighting strategic synergies and short- and long-term opportunities for strengthening Italy's role in the European Research Area

**Anna Pelagotti**, CNR Liaison Officer, Brussels

**Lorenzo Tombaresi**, CNR Liaison Officer, Brussels

**Angelo Volpi**, CNR-ICMATE, Milano

**Francesca Galli**, MUR, Head of Unit within the Cabinet Office

**15:40-16:20** Sponsors (Crisel Instruments, VCS, Gambetti Kenologia)

**16:20-16:50** COFFEE BREAK

**December 15<sup>th</sup>, 2025**

**16:50-17:10 Highlights on Heritage science, Vision science, Technical optics and Materials for renewable energies**

*ERC Starting Grant: Advancing Novel Optical Methods for Wall Paintings*

**Antonina Chaban**, CNR-INO Firenze

**17:10-18:30 Round table on PNRR Research Infrastructures and Innovation Ecosystems**

*CNR-INO outlook on building innovation capacity and connectivity for a stronger national research landscape*

A discussion on how PNRR Research Infrastructures and Innovation Ecosystems can strengthen national research through enhanced connectivity and innovation capacity, with CNR-INO's perspective

**Raffaella Fontana**, PNRR RI H2IOSC, CNR-INO Firenze

**Leo Gizzi**, PNRR RI EuAPS and IE THE, CNR-INO Pisa

**Giacomo Roati**, PNRR RI I-PHOQS, CNR-INO Sesto

**Paolo De Natale**, PI PNRR RI I-PHOQS, CNR-INO Firenze, CNR-INO Acting Director

**Francesca Spataro**, Infrastructure Manager PNRR IR EBRAINS-Italy, CNR-IBF Palermo

**Ugo Cortesi**, co-PI PNRR RI EMM, CNR-IFAC Sesto

**18:30** Transfer to LENS for Poster session

**18:45** Poster session (LENS)

**19:30** DINNER (LENS)



**December 16<sup>th</sup>, 2025**

**09:00-09:20 Highlights on Quantum optics, information and metrology**

*Quantum signatures in the motion of a levitated nanoparticle*

**Antonio Pontin**, CNR-INO Sesto FI

**09:20-10:40 Round table on PNRR Extended Partnerships and National Research Centres**

*Extended Partnerships and National Centres: A CNR-INO strategic outlook*

A strategic overview of CNR-INO's role in Extended Partnerships and National Centres, focusing on integration, synergies, and long-term research impact.

**Moderator: Luca Peruzzi**, Journalist

**Stefano Fabris**, CNR-DSFTM Director

**Alessandro lafrati**, PNRR CN MOST, CNR-INM Director

**Aldo di Carlo**, PNRR PE NEST, CNR-ISM Director

**Raffaella Maria Balestrini**, PNRR CN AGRITECH, CNR-IBBR Director

**Andrea Passarella**, PNRR PE SERICS & PE RESTART, CNR-IIT Director

**10:40-11:10 COFFEE BREAK**

**11:10-11:30 Highlights on Biophotonics**

*Nonlinear all-optical interrogation of brain networks*

**Lapo Turrini**, CNR Sesto FI

**11:30-12:50 Round table on CNR-INO institutional activities**

*CNR-INO practices, updates and discussion*

**Giulio Bollino**, Technology Transfer

**Elisabetta Baldanzi**, Outreach

**Andrea Sordini**, Computing and network systems

**Roberta Parenti**, Procurements of goods and services

**David Jafrancesco**, Safety



**December 16<sup>th</sup>, 2025**

**12:50-13:20 Highlights on **Sensors, Spectroscopy, and Communications****

*New Fluorescent Antennas for Optical Wireless Communication: Towards the 6G Revolution*

**Marco Meucci**

*Advancing infrared sources towards the quantum limit and beyond for sensing and communication*

**Tecla Gabbrielli**

**13:20-13:30** Final remarks and conclusion

**13:30-14:30** LIGHT LUNCH

