

DOCTORAL TRAINING PROGRAMME 2026

EMERGING SUPERCONDUCTING TECHNOLOGIES FOR QUANTUM SENSING AND COMPUTING

ECT* - Villa Tambosi, Villazzano

Monday June 22

- 2.30 PM: Alessandro **Roggero** - UNIVERSITY OF TRENTO - Dip. Fisica
"Nuclear dynamics on digital quantum computers"
- 3.00 PM: Philipp **Hauke** - INFN-TIFPA - Q@TN
"Quantum computers for solving hard optimization and sampling problems: from soft-matter applications to quantum magic"

Thursdsay June 25

- 2.30 PM: Gianluca **Rastelli** - Pitaevskii BEC Center - UNITN Dip. Fisica
"Circuit Quantum Electrodynamics with Semiconductor Quantum Dots"
- 3.00 PM: Federica **Mantegazzini** - FBK - UNITN - INFN-TIFPA
"Microwave photonics with high kinetic inductance waveguides"
- 4.00 PM: Francesco **Pederiva** - UNIVERSITY OF TRENTO Dip. Fisica
"Hybrid quantum simulations of nuclear reactions with realistic potentials"

Friday July 3

- 9.30 AM: Iacopo **Carusotto** - Pitaevskii BEC Center - UNITN Dip. Fisica
"Superconducting circuits as a platform for strongly interacting fluids of microwave photons"
- 10.00 AM: Andrea **Vinante** - CNR - Istituto di Fotonica e Nanotecnologie - FBK
"Levitated magneto mechanics with superconducting circuits"

ECT* Director: Prof. Ubirajara van Kolck

The ECT* is part of the Fondazione Bruno Kessler. The Centre is funded by the Autonomous Province of Trento, funding agencies of EU Member and Associated states, and by INFN-TIFPA and has the support of the Department of Physics of the University of Trento.

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