

Research supervisors, 2024

Experiment

Benjamin Sacepe <https://sacepe-quest.neel.cnrs.fr/>

Low-dimensional and disordered superconductivity and Quantum Hall effects in graphene

Nicolas Roch <http://perso.neel.cnrs.fr/nicolas.roch/>

Olivier Buisson <https://quantum.univ-grenoble-alpes.fr/the-network/buisson-olivier-721166.kjsp>

Many-body quantum optics with superconducting circuits, Superconducting qubits

Alexey Ustinov <https://www.phy.kit.edu/english/ustinov.php>

Superconducting quantum circuits, Decoherence, Two-level quantum systems

Ioan Pop https://www.phy.kit.edu/english/scientists_pop_ioan.php

Superconducting qubits, High-impedance materials, Experiments with artificial atoms

Wulf Wulfhekel <https://www.phy.kit.edu/english/wulfhekel.php>

Scanning tunneling microscopy for studying physics of magnetic nanostructures, Spin and charge transport, Superconductivity and molecular electronics

Eli Zeldov <https://www.weizmann.ac.il/physics/prof-eli-zeldov>

Superconductivity, Nano-scale superconducting sensors

Dragan Mihailović <https://www.nanocenter.si/>

Nonequilibrium quantum states

Tomaž Mertelj <http://www-f7.ijs.si/about-us/>

Nonequilibrium quantum states in magnetic materials

Theory

Mikhail Feigel'man (on leave from L. D. Landau Institute for Theoretical Physics)

<http://www.itp.ac.ru/en/persons/feigelman-mikhail-viktorovich/>

Quantum condensed matter theory: Non-ergodic many-body states, pseudo-gapped and granular superconductors, Electron-phonon kinetics in a mixed state of superconductors, [proposed projects](#)

Yuli Nazarov <https://nazarov-group.tudelft.nl/yuli-nazarov/>

Mesoscopic quantum systems and topological phenomena

Elio König <https://www.fkf.mpg.de/person/106442/2206>

Strongly correlated electron systems, Topology, Quantum transport and optics

Pavel Ostrovsky <https://www.fkf.mpg.de/person/31770/2206>

Quantum many-body theory

Vladimir Kravtsov <http://users.ictp.it/~kravtsov/>

Anderson and Many-Body Localization, Quantum non-ergodicity

Tomaž Prosen <https://chaos.fmf.uni-lj.si/members/professor-tomaz-prosen/>

Quantum Chaos, Integrable systems, Quantum open many-body systems, Exact solutions of Lindblad equation, Ergodicity breaking, Nonequilibrium dynamics, Floquet quantum circuits, Dual-unitary models, Dynamical full counting statistics, Anomalous quantum transport

Denis Golež <https://sites.google.com/view/dgolez/home?authuser=0>

Superconducting qubits in non-Markovian environment in and out of equilibrium, Nonlinear transport in quantum nanostructures, Entropy cooling for quantum annealers

Jernej Mravlje <http://www-f1.ijs.si/~mravlje/>

High-harmonic generation in Weyl semi metals, Weyl physics in SrRuO₃ and other pseudo-cubic ruthenates, High-precision calculations of transport applied to optical lattices, Quantum quenches in interacting topological insulators

Lev Vidmar <https://web-f1.ijs.si/user/lev.vidmar/>

Ergodicity breaking transitions, Many-body and single-particle quantum chaos, Quantum thermalization, Entanglement in many-body quantum systems

Zala Lenarčič <http://www-f1.ijs.si/~zala/>

Neural and tensor network quantum modelling, Noise characterization for quantum devices, Engineering transport properties by driving

How to contact your future supervisor

For the initial contact with a supervisor you wish to deal with, please, send e-mail to QTFuture@nanocenter.si