

17th Symposium on Topological Quantum Information

Topological Quantum Matter in Cold-Atom Setups

MPQ - Herbert Walther lecture room

Thursday, April 16

9.00 – 10.30: Nigel Cooper
Artificial Gauge Fields for Cold Atoms

10.30 - 11.00 -- Coffee Break

11.00 – 11.30: Nathan Goldman
Beyond the Chern-number measurement...

11.30 – 12.10: Rémi Desbuquois
Experimental realization of the Haldane model with ultracold atoms

12.10 – 12.50: Juliette Simonet
Spin-orbit coupling in periodically driven optical lattices

12.50 - 14.15 -- Lunch (at IPP canteen: we meet at the entrance of MPQ and we go there)

14.15 – 15.00: Mikhail Baranov
Majorana fermions in open quantum systems

15.00 – 15.45: Sylvain Nascimbène
Dynamic optical lattices of sub-wavelength spacing for ultracold atoms

15.45 - 16.15 -- Coffee Break

16.15 – 16.40: Davide Rossini
Topological superconductors in dissipative number-conserving atomic quantum wires

16.40 – 17.05: Jan Carl Budich
Dissipative Chern Insulators

17.05 – 17.30: Juan Jose Garcia Ripoll
Winding number in interacting Haldane model

17.30 – 17.55: Earl Campbell
Thermalization and decoherence in open Majorana systems

18.00 - 19.30 -- Poster Session

Social dinner starting at 20.00 (Poseidon Restaurant)

Friday, April 17

9.00 – 10.30: Immanuel Bloch
Realizing Artificial Gauge Fields with Ultracold Atoms

10.30 - 11.00 -- Coffee Break

11.00 – 11.30: Monika Aidelsburger
Measuring the Chern number of artificially generated Hofstadter bands with bosonic atoms

11.30 – 12.00: Jacopo Catani
Observation of Chiral Edge States in atomic Hall ribbons with fermionic Ytterbium atoms

12.00 – 12.30: Andrea Alberti
Topological phases in discrete-time quantum walks

12.30 - 14.00 -- Lunch (at IPP canteen: we meet at the entrance of MPQ)

14.00 – 14.45: Alessio Celi
Synthetic Topologies in synthetic lattices

14.45 – 15.10: Tobias Grass
Topological phases in spin chains with long-range interactions and artificial magnetic fields

15.10 – 15.35: Luca Taddia
Magnetic crystals and helical liquids in earth-alkaline Fermi cold gases

15.35 - 15.50 -- Short Break

15.50 – 16.15: Matteo Rizzi
Strongly correlated states of trapped ultracold fermions in a $U(2)$ gauge potential

16.15 – 16.40: Salvatore Butera
Quantized vortices in interacting gauge theories