

**MC8 Collective and nonlinear phenomena in confined quantum systems I**

Monday, 2 September, morning

Topic: Quantum Gases I

Chair(s): Serghei Klimin

Room:

Hours	ID	Name	Type	Title
10h30-11h00	12569	Taira Kawamura	Invited	Emergence of an inhomogeneous superfluid state in a driven-dissipative two-dimensional Fermi condensate
11h00-11h30	13172	Leonardo Pisani	Invited	Critical current in the BCS-BEC crossover and collective excitations in Bose-Fermi mixture
11h30-12h00	14345	Hadrien Kurkjian	Invited	Dispersion of hydrodynamic sound in a Fermi liquid
12h00-12h30	13828	Jacques Tempere	Invited	Vortex dynamics in superfluid Fermi gases
12h30-13h00	12384	Luca Salasnich	Invited	Finite-size effects in the two-dimensional BCS-BEC crossover

MC8 Collective and nonlinear phenomena in confined quantum systems II

Monday, 2 September, afternoon

Topic: Quantum Gases II

Chair(s): Luca Salasnich

Room:

Hours	ID	Name	Type	Title
16h00-16h30	12771	Carlos Sa De Melo	Invited	Collective Modes of Two-Dimensional Superfluid Fermi Gases from the BCS to the Bose Limit
16h30-17h00	13086	Stefania De Palo	Invited	Quasi-one dimensional dipolar bosonic systems: from gas to droplet formation
17h00-17h30	12757	Jordi Boronat	Invited	Quantum-Monte-Carlo-based density functional for ultracold Bose gases
17h30-17h45	13271	Thomas Repplinger	Oral	Ab initio description of sound in a Fermi gas
17h45-18h00	12783	Alice Bellettini	Oral	Rotational states of an asymmetric vortex pair with mass imbalance in binary condensates
18h00-18h15	13034	Cesar Cabrera	Oral	Tracking the confinement-induced hybridization of the Higgs mode in a strongly interacting superfluid

**MC8 Collective and nonlinear phenomena in confined quantum systems III**

Tuesday, 3 September, morning

Topic: Polarons and Excitons**Chair(s):** Jacques Tempere**Room:**

Hours	ID	Name	Type	Title
10h30-11h00	12677	Vladimir Fomin	Invited	New Characteristics of Magneto-Polarons in Transition Metal Dichalcogenides
11h00-11h30	13063	Andrey Mishchenko	Invited	Going to exact control of the nonlinear electron-phonon interaction
11h30-11h45	12308	Serghei Klimin	Oral	Analytic method for polarons with a quadratic interaction in a non-parabolic band
11h45-12h00	13476	Filippo Pascucci	Oral	Density collective modes in bilayer exciton systems
12h00-12h15	12383	Matthew Houtput	Oral	Beyond the Fröhlich Hamiltonian: Large polarons in anharmonic solids

MC8 Collective and nonlinear phenomena in confined quantum systems IV

Tuesday, 3 September, afternoon

Topic: Nonlinear and Nonequilibrium Systems**Chair(s):** Vladimir Fomin**Room:**

Hours	ID	Name	Type	Title
16h00-16h30	12622	Henrique C. Prates	Invited	Bloch-Landau-Zener oscillations in a quasi-periodic potential
16h30-17h00	12732	Anatoly Kuklov	Invited	Transverse Quantum Fluids
17h00-17h30	12938	Francesco Minardi	Invited	Breakup of two-components quantum droplets
17h30-18h00	13907	Roberta Citro	Invited	Hall effect in atomic ladder systems
18h00-18h15	12963	Alberto Nardin	Oral	Quantum nonlinear optics on the edge of small lattice fractional quantum Hall fluids
18h15-18h30	13473	J.M.A. Oliveira Pinho	Oral	Polariton-assisted second-harmonic generation in graphene