

Cold Atom Workshop Barcelona

Thursday 25 January 2024

Day 1: Session I (Chair: Anna Sanpera, Universitat Autònoma de Barcelona) - Aula Enric Casassas (10:00 - 11:20)

time	[id] title	presenter
10:00	[2] Bosonic orbital Su-Schrieffer-Heeger model in a lattice of rings	AHUFINGER (UNIVERSITAT AUTÒNOMA DE BARCELONA), Verònica
10:20	[3] Topological phase diagram of optimally shaken honeycomb lattices	MODUGNO (UNIVERSIDAD DEL PAÍS VASCO UPV/EHU & IKERBASQUE), Michele
10:40	[5] Phononic Topological Dissipative Phases in Trapped Ions	PORRAS (CSIC-MADRID), Diego
11:00	[6] Bosons in a flat band	GRASS (DIPC-DONOSTIA INTERNATIONAL PHYSICS CENTER), Tobias

Day 1: Session II (Chair: Leticia Tarruell, ICFO-The Institute of Photonic Sciences) - Aula Enric Casassas (11:50 - 13:10)

time	[id] title	presenter
11:50	[8] Exploring quantum magnetism and spin squeezing with Rydberg atom arrays	BARREDO (CINN - CSIC ASTURIAS), Daniel
12:10	[9] A strontium quantum-gas microscope in a clock-magic lattice	BUOB (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Sandra
12:30	[16] Quantum jump photo-detection and quantum trajectory analysis in a single atom experiment	VEYRON (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Romain
12:50	[11] Out-of-equilibrium quantum phase separation in free-space atomic ensembles	GONCALVES (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Daniel

Day 1: Session III (Chair: Miguel Ángel Cazalilla, Donostia International Physics Center) - Aula Enric Casassas (15:00 - 16:20)

time	[id] title	presenter
15:00	[12] Exploring the supersolid stripe phase in a spin-orbit coupled BEC	HIRTHER (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Sarah
15:20	[13] Supersolid Phase in Multi-Band Bose-Hubbard Model with Long-Range Interactions	WATANABE (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Yuma
15:40	[14] Supersolid formation time shortcut and excitation reduction by manipulating the dynamical instability	ALAÑA (UNIVERSIDAD DEL PAÍS VASCO / EHU), Aitor

16:00	[10] Modeling Particle Loss in Open Systems using Keldysh Path Integral and Second Order Cumulant Expansion	HUANG (DIPC-DONOSTIA INTERNATIONAL PHYSICS CENTER), Chen-How
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Day 1: Session I (Chair: Grigory Astrakharchik, Universitat Politècnica de Barcelona) - Aula Enric Casassas (16:50 - 18:10)

time	[id] title	presenter
16:50	[15] Multiple polaron quasiparticles with dipolar fermions in a bilayer	TIENE (UNIVERSIDAD AUTÓNOMA DE MADRID), Antonio
17:10	[18] Dysprosium density functional: A Quantum Monte Carlo based functional to study dipolar droplets and supersolidity	BOMBÍN (UNIVERSITAT POLITÈCNICA DE CATALUNYA), Raúl
17:30	[19] Effects of curved geometry and finite temperature in dipolar Bose Einstein Condensates	SÁNCHEZ-BAENA (UNIVERSITAT POLITÈCNICA DE CATALUNYA), Juan
17:50	[17] TBA (Spinor Condensate Experiment)	AYBAR (ICFO - THE INSTITUTE OF PHOTONIC SCIENCES), Enes