

Short Talks

Short Talks I (Monday , 14 Dec. 11:00 – 12:30 h)

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| 1 | Ragheed Alhyder | An impurity immersed in a double Fermi Sea |
| 2 | Maria Arazo | Shell-shaped dipolar BECs |
| 3 | Antun Balaz̃ | Faraday and Resonant Waves in Dipolar Cigar-Shaped Bose-Einstein Condensates |
| 4 | Mikhail Barabanov
<i>Cancelled on short notice</i> | Probing of multi-quark structure hadron and heavy ion collisions |
| 5 | Miguel Angel Bastarrachea Magnani | Bose and Fermi polaron-polariton mediated interactions |
| 6 | Luca Bayha | Observation of Pauli Crystals |
| 7 | Marvin Holten | Observation of Pauli Crystals |
| 8 | André Becker | Thermometer for interacting harmonically trapped fermions |
| 9 | Hauke Biss | Observation of superfluidity in a strongly correlated two-dimensional Fermi gas |
| 10 | Patrick Boegel | Self-focusing of BEC in quasi 1D |
| 11 | Martin Bonkhoff | Bosonic continuum theory of one-dimensional lattice anyons |

Short Talks II (Monday , 14 Dec. 14:00 – 15:30 h)

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| 12 | Sandra Brandstetter | Few Fermions in tunable potentials |
| 13 | Mykyta Bulakhov | Thermodynamics of a weakly interacting Bose gas above the transition temperature |

Short Talks

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| 14 | Viktor Cikojevic | Towards a QMC-based density functional including finite-range effects: excitation modes of a 39 K quantum droplet |
| 15 | Anna Dawid | Phase Detection with Neural Networks: Interpreting the Black Box |
| 16 | Giulia De Rosi | Thermal evaporation and thermodynamics of one-dimensional liquids in weakly-interacting Bose-Bose mixtures |
| 17 | Mohammed Tayeb Meftah + Mosbah Difallah | Bose-Einstein Condensation in Fractional Quantum Statistical Mechanics |
| 18 | Gabriel Dufour | Many-body dynamics of partially distinguishable particles |
| 19 | Hodei Eneriz | Cavity QED with Bose-Einstein Condensates in a running wave resonator |
| 20 | Andris Erglis | Bose-Einstein Condensation in Planar Cavity |
| 21 | Uwe Fischer | Going beyond Hartree-Fock: Fully self-consistent determination of the many-body state of ultracold bosonic atoms and benchmarking with the exact two-boson solution |
| 22 | Tobias Hammel | A new apparatus for experiments with ultracold Lithium-6 atoms |

Short Talks III (Monday , 14 Dec. 16:00 – 17:00 h)

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| 23 | Mehedi Hasan | Indirect Observation of Zitterbewegung in non-Abelian Gauge Field |
| 24 | Jonas Benedikt Hauck | Strong Boundary and Trap Potential Effects on Emergent Physics in Ultra-Cold Gases |

Short Talks

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| 25 | Felipe Isaule | Functional renormalization for Bose-Bose mixtures |
| 26 | Hans Keßler | Observation of a dissipative time crystal |
| 27 | Eugene Kogan | To have (Kondo effect) and have not renormalization and scaling |
| 28 | Smail Kouidri | Finite temperature thermal cloud of dipolar gas in presence of the three-body interactions |
| 29 | Arthur La Rooij | Single-atom imaging of fermions in a quantum-gas microscope |
| 30 | Rui Li | Induced quantized transport by topology transfer between two coupled 1D lattice systems |

Short Talks IV (Tuesday, 15 Dec. 11:00 – 12:30 h)

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| 31 | Axel U. J. Lode | Optimized Observable Readout from Single-shot Images of Ultracold Atoms via Machine Learning |
| 32 | Aditi Mandal | Plasmon modelling in core-level photoemission within multiple scattering approach |
| 33 | Leonardo Mazza
<i>Cancelled on short notice</i> | Strong correlations in lossy one-dimensional quantum gases: from the quantum Zeno effect to the generalized Gibbs ensemble |
| 34 | Simeon Mistakidis | Engineering the many-body quantum dynamics and induced correlations of Bose polarons |
| 35 | Ivan Morera-Navarro
<i>Cancelled on short notice!</i> | Quantum liquids and pair formation in one-dimensional optical lattices |

Short Talks

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| 36 | Ajay Nath | Generation of solitary matter waves at hottest negative temperature |
| 37 | Mama Kabir
Njoya Mforifoum | Interference of two composite particles |
| 38 | Alexey Okulov | Detection of the reference frame motions with twisted superfluids |
| 39 | Felix Palm | Bosonic Pfaffian State in the Hofstadter-Bose-Hubbard Model |
| 40 | Krzysztof Pawłowski | Strongly correlated quantum droplets in quasi-1D dipolar Bose gas |
| 41 | Philipp Preiss | Many-Body Physics and Quantum Information in Rapidly Assembled Lattice Systems |

Short Talks V (Tuesday, 15 Dec. 14:00 – 15:30 h)

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| 42 | Zhiyuan Wei | Generation of Photonic Matrix Product States with a Rydberg-blockaded atomic array |
| 43 | Maximilian Prüfer | The quantum effective action for ultracold gases far from equilibrium |
| 44 | Milan Radonjic | Bose-Einstein condensates in weak and strong disorder potentials |
| 45 | Lukas Rammelmüller | Investigation of pairing in 1D spin- and mass imbalanced Fermi gases through shot noise correlations |
| 46 | Sayak Ray | Prethermalization with negative specific heat |
| 47 | Fabio Revuelta +
Alejandro Saenz | Inelastic confinement-induced resonances in different dimensions |

Short Talks

- 48 Asaad Sakhel
Cancelled on short notice ~~Effect of trapping geometry on the parametric resonances in a disordered Bose-Einstein condensate driven by an oscillating potential~~
- 49 Poornima Shakya Snake states of neutral atom from synthetic gauge field
- 50 Marija Šindik Quantum droplets in dipolar Bose-Einstein condensates in a ring potential
- 51 Andrii Sotnikov Orbital ordering of ultracold alkaline-earth atoms in optical lattices
- 52 Gabriele Spada The polarized Fermi-Hubbard superfluid at large order

Short Talks VI (Tuesday, 15 Dec. 16:00 – 17:00 h)

- 53 Philipp Stammer State distinguishability under weak measurement and post-selection: A system and device perspective
- 54 Enrico Stein Trapped Photon Gases at Dimensional Crossover from 2D to 1D
- 55 Kuldeep Suthar Many-body localization with synthetic gauge fields in disordered Hubbard chains
- 56 Michal Tomza Ultracold ion-atom collisions in the quantum regime
- 57 Vranjes Markic QMC study of trapped Bose-Bose mixtures at finite temperature
- 58 Etienne Wamba Exact N-point function mapping between pairs of experiments with Markovian open quantum systems

Short Talks

- 59 Alexander Wolf **Ground state and dynamics of shell-shaped BEC mixtures**
- 60 Hongzheng Zhao **Quantum Many-Body Scars in Optical Lattices**