

## Poster Session, Tuesday 01 October 2024 14:15 h

Riccardo Andreoni	<b>Stochastic sampling-based classification of states of matter</b>
Nicolò Antolini	<b>Measurement of the superfluid fraction of a supersolid by Josephson effect</b>
Devendra Singh Bhakuni	<b>Diagnosing transport from wave function snapshots</b>
Stefan Birnkammer	<b>Prethermalization in one-dimensional quantum many-body systems with confinement</b>
Justus Brüggenjürgen	<b>A coherence microscope for quantum gases</b>
Giancarlo Calvanese Strinati	<b>Josephson current flowing through a nontrivial geometry</b>
Luca Cavicchioli	<b>Dynamical formation of multiple quantum droplets in a Bose-Bose mixture</b>
Cristina Cicali	<b>Atom transport optimization: theoretical frameworks, algorithms, and experimental integration</b>
Renan da Silva Souza	<b>Interplay of Short-Range and Long-Range Interactions in Ultracold Fermionic Lattice Systems: A Real-Space DMFT Approach</b>
Alexandre De Martino	<b>Report on the construction of a new Erbium-Lithium machine</b>
Giulia Del Pace	<b>Persistent currents in a Josephson junction necklace</b>
Marco Di Liberto	<b>Emergent orbital physics and chiral phases in dimerized <math>\pi</math>-flux lattices</b>
Eugen Dizer	<b>Spectral properties of ultracold Fermi gases</b>

## Poster Session, Tuesday 01 October 2024 14:15 h

Gustavo Alexis Dominguez Castro	Relaxation in dipolar spin ladders: From pair production to false-vacuum decay
Marco Fattori	Differential Mach-Zehnder interferometry with trapped Bose Einstein condensates
Giovanni Ferioli	Non-Gaussian Correlation in the steady state of a superradiant cloud
Marcia Frometa Fernandez	Shapiro steps in a ${}^6\text{Li}$ Fermi superfluid Josephson junction
Albert Gallemí	Two-fluid character of a binary dipolar quantum gas across the superfluid-supersolid-crystal phase transition
Youqi Gang	Towards low temperature states in a Fermi-Hubbard quantum simulator
Patrick Geraghty	Long range interactions in synthetic dimensions
Nicola Grani	Dissipative vortex dynamics in strongly interacting Fermi superfluid.
Fabian Grusdt	Quantum simulation of Hubbard models: From unconventional superconductors to gauge theories
Luca Guariento	Strontium atoms in optical tweezers
Tobias Hammel	A modular quantum gas platform
Florian Hirsch	Cold atomic excitons
Florian Kiesel	Report on the construction of a new Erbium-Lithium machine
Lorenzo Maffi	Vortex dynamics in strongly interacting superfluid

## Poster Session, Tuesday 01 October 2024 14:15 h

Arkajyoti Maity	Driven-dissipative fermionized topological phases of strongly interacting composite bosons
Salvatore R. Manmana	What can we learn from time-dependent spectral functions?
Fabio Mezzacapo	Scalable spin squeezing from critical slowing down in short-range interacting systems
Alessandro Muzi Falconi	Ytterbium optical tweezers for single-atom resolved many-body physics
Sara Nicoletti	Optimal control transport of neutral atoms in optical tweezers
Kristian Knakkegaard Nielsen	Thermal localisation and pairing by disorder of dopants in a magnetic spin ladder
David Pascual Solis	Advancements towards simulating SYK Model and its variants in cQED platforms
Luka Pavesic	Constrained dynamics and confinement in the two-dimensional quantum Ising model
Leonardo Pisani	Critical Current throughout the BCS-BEC Crossover: Landau Critical Velocity and Persistent Currents
Andrea Pizzi	Quantum scars in many-body systems
Niklas Rasch	Anomalous non-thermal fixed point in a Quasi-2d Dipolar Bose Gas
Michael Rautenberg	Towards Fermi polarons with heavy impurities
Matteo Rizzi	Fractional quantum Hall states with variational projected entangled-pair states: A study of the bosonic Harper-Hofstadter model

## Poster Session, Tuesday 01 October 2024 14:15 h

Stephan Roschinski	<b>Towards deterministic entanglement generation in a new atom-cavity setup</b>
Christian Friedrich Schmidt	<b>Cosmological particle production in a Quantum Field Simulator as a Quantum-Mechanical scattering problem</b>
Carlo Sias	<b>Control of ion crystals for atom-ion quantum mixtures</b>
Rohan Srikumar	<b>Dynamical effects in trilobite molecules</b>
Arthur Vesperini	<b>Entanglement and quantum correlations in the Tavis-Cummings model</b>
Ekaterina Vlasiuk	<b>Two-dimensional spectroscopy of magnetic systems</b>
Darvin Wanisch	<b>Probing entanglement in open quantum systems with tree tensor networks</b>
Matteo Wauters	<b>Gauge protection in quantum simulations of non-Abelian LGTs by dynamical post-selection on qudit platforms</b>
Matthias Weidemüller	<b>Rydberg Spin Glas</b>
Tomasz Zawiślak	<b>Anomalous Doppler effect at zero temperature in density modulated superfluids and supersolid</b>
Philip Zechmann	<b>Fractonic phases in a constrained Bose-Hubbard model</b>