Monday, Nov 13, 2023

8:50am Lars Bildsten (KITP) Welcome [Video]
9:00am Hossein Sadeghpour (ITAMP) Universality class of a spinor BEC far from equilibrium [Video] [CC]
9:45am Tobias Donner (ETH Zurich) Engineering of many-body states in a driven-dissipative cavity QED system [Slides] [Video] [CC]
10:30am Morning Break

11:00am Guido Pagano (Rice) Trapped-Ion Simulation of Closed and Open Quantum Systems with Long-Range Interactions [Embargoed]
11:45am Archana Kamal (UMass Lowell) Quantum reservoir engineering for fast and scalable entanglement stabilization [Video] [CC]
12:30pm Lunch Break

2:00pm Leo Radzihovsky (CU Boulder) Coulomb Universality [Slides] [Video] [CC]
2:45pm Fabio Cinii (U Florence) Bosons in unconventional geometries [Video] [CC]
3:30pm Afternoon Break

4:00pm Roger Melko (U. Waterloo) Language models for Rydberg atom quantum simulation [Video] [CC]
4:45pm Andrea Trombettoni (U Trieste) Critical geometry approach to phase transitions [Video] [CC]
5:30pm SHUTTLE TO BWSCI

Tuesday, Nov 14, 2023

9:00am Tomotaka Kuwahara (RIKEN) Optimal light cone and digital quantum simulation of interacting bosons [Slides] [Video] [CC]
9:45am Tanja Mehlstaubler (PTB) Non-Equilibrium Dynamics and Nanofriction In Ion Coulomb Crystal [Slides] [Video] [CC]
10:30am Morning Break

11:00am Nicolo Defenu (ETH Zurich) Emulating long-range interactions via disorder [Video] [CC]
11:45am Angela Foerster (UFRGS) Design of integrable long-range quantum devices [Slides] [Video] [CC]
12:30pm Lunch Break

2:00pm Susanne Yelin (Harvard) QED with cooperative atom arrays and applications [Video] [CC]
2:45pm Stefan Kehrein (U Goettingen) Page curve-like behavior in an exactly solvable model [Slides] [Video] [CC]
3:30pm Afternoon Break

4:00pm Michael Kastner (Stellenbosch U) Equilibration timescales of isolated quantum systems: the role of locality [Slides] [Video] [CC]
4:45pm Marcos Rigol (Penn State Eberly College of Science) Far-from equilibrium dynamics of quantum many-body scars in near-integrable one-dimensional dipolar quantum gases [Slides] [Video] [CC]
5:30pm RECEPTION and POSTER SESSION I

6:00pm SPECIAL EVENTS DINNER

8:00pm SHUTTLE TO BWSCI

Wednesday, Nov 15, 2023

9:00am Norman Yao (Harvard) Spin liquids in a dipolar Rydberg array [Video] [CC]
9:45am Or Katz (Cornell) Exploring Phases of Matter in Long-Range Trapped-Ion Crystals [Slides] [Video] [CC]
10:30am Morning Break

11:00am Andy Lucas (CU Boulder) Long-range-enhanced surface codes [Video] [CC]
11:45am Zhixuan Gong (Colorado School of Mines) Speed limit of quantum state transfer in a fully-connected quantum computer [Video] [CC]
12:30pm Lunch Break

2:00pm Misha Lukin (Harvard) Long-range interactions and quantum error correction frontier [Embargoed]
2:45pm Fabian Heidrich-Meisner (U Goettingen) Kinetic constraints and disorder: Competition or cooperation? [Slides] [Video] [CC]
3:30pm Afternoon Break

4:00pm Moderator: Alexey Gorshkov (U Maryland) Panel Discussion [Embargoed]
4:45pm Tommaso Macri (Quera Computing) Poster Session 2
5:30pm RECEPTION

6:00pm SPECIAL EVENTS DINNER

8:00pm SHUTTLE TO BWSCI

Thursday, Nov 16, 2023

9:00am Mark Srednicki (UCSB) Introduction to Eigenstate Thermalization [Video] [CC]
9:45am Ceren Dag (Harvard) Breaking ergodicity: quantum scars, quantum many-body scars and regular eigenstates [Video] [CC]
10:30am Morning Break

11:00am Luca Tagliacozzo (CSIC) Tensor networks algorithms and their cost for out-of-equilibrium dynamics [Video] [CC]
11:45am Maksim Serbyn (IST) - Quantum many-body scars with periodic driving: stabilization, entanglement steering, and exact models

12:30pm - Lunch Break

2:00pm - CONFERENCE END - SHUTTLE TO BWSCI *Also available to SB Airport and SB Airbus, Goleta location (See Registration Desk BEFORE THURSDAY to sign up.)