

Monday, 24 October

8:30 – 9:00 Registration

9:00 – 9:05 Welcome

9:05 – 9:40 Invited: Pedro Schlottmann

Title: The topological Kondo insulator SmB₆

9:40 – 10:15 Invited: Norio Kawakami

Title: Correlated edge states in topological Mott insulators

10:15 – 10:35 Contributed: Oleksandr Balabanov

Title: Symmetry-protected edge states in periodically driven band insulators

10:35 – 10:55 Coffee break

10:55 – 11:30 Invited: Marcos Rigol

Title: Emergent eigenstate solution to quantum dynamics far from equilibrium

11:30 – 11:50 Contributed: Rubem Mondaini

Title: Many body (de)localization in fermionic chains

11:50 – 12:10 Contributed: Pedro Ribeiro

Title: Steady-state properties of a thermodynamically unbalanced Fermi gas

12:10 – 12:30 Contributed: Max E. Sorantin

Title: Auxiliary master equation approach for strongly correlated quantum impurities out of equilibrium

12:30 Lunch break

15:00 – 15:30 In memoriam: Paco Guinea, Marcos Rigol, Stefan Wessel
Alejandro Muramatsu

15:30 – 16:30 Invited colloquium: Francisco (Paco) Guinea

Title: Novel quantum effects in graphene and two dimensional dichalcogenides

16.30 – 16:50 Coffee break

16:50 – 17:25 Invited: Shi-Ping Feng

Title: Doping and energy evolution of magnetic excitations in electron-doped cuprate superconductors

17:25 – 17:45 Contributed: Eduardo V. Castro

Title: Raise and collapse of strain-induced pseudo-Landau levels in graphene

17:45 – 18:05 Contributed: Mariana Malard

Title: Synthesizing Majorana zero-energy modes in a periodically gated quantum wire

Tuesday, 25 October

9:00 – 9:35 Invited: Stefano Chesi

Title: Dephasing due to nuclear spins in large-amplitude electric dipole spin resonance

9:35 – 10:10 Invited: Xin-Cheng Xie

Title: Dephasing and disorder effects in topological systems

10:10 – 10:45 Invited: Jian-Ping Hu

Title: Genes for unconventional high temperature superconductors

10:45 – 11:05 Coffee break

11:05 – 11:40 Invited: Johanna Erdmenger

Title: Entanglement entropy and quenches in an AdS/CFT Kondo model

11:40 – 12:15 Invited: Ying-Dan Wang

Title: Optimization of STIRAP-based state transfer under dissipation

12:15 – 12:35 Contributed: Filiberto Ares

Title: Complex geometry in the entanglement entropy of fermionic chains

12:35 Lunch break

15:00 – 16:00 Invited colloquium: Qian Niu

Title: Geometric phase effects on electronic properties

16:00 – 16:35 Invited: Maria A. H. Vozmediano

Title: Topological metal from a disordered class A insulator

16:35 – 16:55 Coffee break

16:55 – Poster presentations (2 minutes each) and poster session

Wednesday, 26 October

9:00 – 9:35 Invited: Xenophon Zotos

Title: Magnetothermal transport in the $S=1/2$ XXZ chain

9:35 – 10:10 Invited: Xi-Wen Guan

Title: Quantum criticality of one-dimensional attractive Hubbard model

10:10 – 10:30 Contributed: Tilen Cadez

Title: One-electron singular spectral features of the 1D Hubbard model at finite magnetic field

10:30 – 10:50 Coffee break

10:50 – 11:50 Invited colloquium: Tomaz Prosen

Title: Quasilocal charges in integrable lattice systems

11:50 – 12:10 Contributed: Hans-Peter Eckle

Title: A generalization of the quantum Rabi model: exact solution and spectral degeneracies

12:10 – 12:45 Invited: Alexander Stolin

Title: Classification of quantum groups

12:45 Lunch break

15:00 Évora has many historical sites that deserve your visit

17:30 Wine tasting in Ervideira Wine Tastings & Shop

Address: Rua 5 de Outubro, 56, Évora

19:30 Banquet in site to be announced

Thursday, 27 October

9:00 – 9:35 Invited: Daniel Braak

Title: Integrable and non-integrable models in quantum optics

09:35 – 09:55 Contributed: Michael Tomka

Title: Geodesic paths for quantum many-body systems

9:55 – 10:30 Invited: Ofer Firstenberg

Title: Structured dressing for photon-photon interactions

10:30 – 10:50 Coffee break

10:50 – 11:25 Invited: Michael Fleischhauer

Title: Reservoir-induced topology and symmetry protected topological order in open quantum chains

11:25 – 12:00 Invited: Michael J. Hartmann

Title: Many-body interactions and topological order with superconducting circuits

12:00 – 12:35 Invited: Philipp Schneeweiß

Title: Chiral nanophotonics and quantum optics

12:35 Lunch break

15:00 – 15:35 Invited: Marco Di Liberto

Title: Interplay between topology and interactions in the SSH model: a dynamical perspective

15:35 – 16:10 Invited: Vladimir V. Konotop

Title: Spin-orbit coupled BECs in lattices: gap solitons, vortices and Bloch oscillations

16:10 – 16:30 Contributed: Krzysztof Bieniasz

Title: Analytical study of spin-orbital polarons in KCuF(3)

16:30 – 16:50 Coffee break

16:50 – 17:25 Invited: Tao Xiang

Title: Charge dynamics of antiferromagnetic ordered Mott insulators

17:25 – 17:45 Contributed: Daniel Huerga

Title: Antiferromagnetic Hamiltonians hosting valence bond crystals

17:45 – 18:05 Contributed: Fatemeh Heydari-Nasab

Title: Stable checkerboard super-solid phase in binary hard-core Bose Hubbard mixture

Friday, 28 October

9:00 – 9:35 Invited: Stefan Wessel

Title: Thermal scaling near 2D fermionic chiral Ising quantum critical points

9:35 – 10:10 Invited: Mucio A. Continentino

Title: Scaling close to first order quantum phase transitions

10:10 – 10:45 Invited: Jian-Xin Li

Title: Quantum phases emerged from the interplay between Mott physics and topology band

10:45 – 11:05 Coffee break

11:05 – 11:40 Invited: Anders W. Sandvik

Title: Anomalous quantum-criticality with two length scales

11:40 – 12:00 Contributed: Luca F. Tocchio

Title: Hidden Mott transition and large-U superconductivity in the two-dimensional Hubbard model

12:00 – 12:20 Contributed: Natalia Lera

Title: Gapped electron fractionalization in robustly one dimensional $\text{Li}_{0.9}\text{Mo}_6\text{O}_{17}$

12:20 – 12:40 Summary and closing remarks by Henrik Johannesson

12:40 Lunch