## Monday, 2 October

8:30 - 9:00 Registration

Approximate location:

https://maps.apple.com/?ll=38.573402,-7.904735&q=Dropped%20Pin&t=m (The entrance to the old University building is through Rua do Cardeal Rei)

9:00 – 9:10 Welcome

9:10 – 9:45 Invited: Mathias Sheurer Title: Exotic many-body physics in van der Waals moiré systems

9:45 – 10:05 Contributed: Kukka-Emilia Huhtinen Title: Quantum geometry and the superfluid weight of a Bose-Einstein condensate

10:05 – 10:25 Contributed: Eduardo B. Molinero Title: Ultrafast dynamics of excitons in strong laser fields

10:25 – 10:50 Coffee break

10:50 – 11:25 Invited: Eduardo Castro Title: The role of quasiperiodicity in moiré electron systems

11:25 – 11:45 Contributed: Henrique C. Prates Title: Bose-Einstein condensates in quasi-periodic lattices: bosonic Josephson junction and multi-mode dynamics

11:45 – 12:20 Invited: Yong P. Chen Title: Quantum dynamics and quantum transport in a spintronic Bose-Einstein condensate in synthetic spaces

12:20 Lunch break

15:00 – 16:00 Invited Colloquium: Florian Meinert Title: Towards a neutral atom quantum simulator with circular Rydberg states

16:00 – 16:20 Contributed: Chris Bühler Title: Quantum fluctuations in one-dimensional supersolids

16:20 – 16:45 Coffee break

16:45: In Memoriam Session (see next page)

## Monday, 2 October

#### **Zoom-streamed In Memoriam Session**

https://videoconf-colibri.zoom.us/j/92067541700?pwd=RzNnU1pEZjF2aWtBL3BvZzBaSUhkQT09 Meeting ID: 920 6754 1700 Password: 080066

16:45 – 17:05: In memoriam by David K. Campbell *Dionys Baeriswyl* 

17:05–17:25: In memoriam by José M. P. Carmelo *Dionys Baeriswyl and Évora Workshops* 

17:25– 17:45: In memoriam by Mikhail Vasilevskiy *Jaime Santos* 

### **Tuesday, 3 October**

9:00 – 9:35 Invited: Sergey Denysov Title: Spectral properties of noisy intermittent scale quantum circuits

9:35 – 9:55 Contributed: Lucas Sá Title: Random Lindblad dynamics: from RMT to SYK, and more in between

9:55 – 10:15 Contributed: Madhumita Sarkar Title: Tuning the phase diagram of a Rosenzweig-Porter model with fractal disorder

10:15 – 10:40 Coffee break

10:40 – 11:15 Invited: Karol Zyczkowski Title: Matrix logistic map: fractal distribution of eigenvalues and transfer of chaos

11:15 – 11:35 Contributed: Nadir Samos Title: Quantum volume, integrability and chaos

11:35 – 11:55 Contributed: Carl Philipp Zelle Title: Universal phenomenology at critical exceptional points of nonequilibrium O(N)O(N) models

11:55 – 12:30 Invited: Aharon Kapitulnik Title: Emerging phenomena at quantum phase transition: The magnetic field tuned superconductor to insulator transition

12:30 Lunch break

15:00 – 16:00 Invited Colloquium: Shinsei Ryu Title: Sachdev-Ye-Kitaev type models with dissipations

16:00 – 16:20 Contributed: Zhao Zhang Title: Entanglement phase transition in two-dimensional ground states

16:20 – 16:45 Coffee break

16:45 – Poster presentations (2 minutes each) and poster session (Poster frame size: 180cm height from the ground x 120cm width)

## Wednesday, 4 October

9:00 – 9:35 Invited: Bogdan A. Bernevig Title: Heavy-fermion physics in twisted bilayer graphene

9:35 – 9:55 Contributed: Miguel Sánchez Title: The correlated insulators of magic-angle graphene under zero and one magnetic flux quanta

9:55 – 10:30 Invited: Tobias Stauber Title: Superconductivity and chirality in graphene superlattices

10:30 – 10:55 Coffee break

10:55 – 11:30 Invited: Jedediah Pixley Title: Infinite randomness and quasiperiodic fixed points at measurement induced phase transitions

11:30 – 11:50 Contributed: Kazuki Yamamoto Title: Entanglement phase transitions in many-body localized systems under continuous measurement

11:50 – 12:25 Invited: Sarang Gopalakrishnan Title: Full counting statistics of nonequilibrium quantum systems

12:25 Lunch break

15:00 Social Program

19:30 Banquet in Restaurant nã t'acho, Rua da Misericórdia 9, 7000-654 Évora

## Thursday, 5 October

9:00 – 9:35 Invited: Claudio Chamon Title: Can black holes be both fast and thorough scramblers?

9:35 – 9:55 Contributed: Domenico Lippolis Title: Estimating the spectral density of unstable scars

9:55 – 10:15 Contributed: Miguel Gonçalves Title: Irrelevance of short-range interactions at quasiperiodic-driven ground-state localization transitions

10:15 – 10:40 Coffee break

10:40 – 11:15 Invited: Smitha Vishveshwara Title: Anyon motion and black hole-like dynamics in quantum Hall bulk geometries

11:15 – 11:35 Contributed: Koushik Swaminathan Title: Signatures of many-body localization of quasiparticles in a flat band superconductor

11:35 – 11:55 Contributed: Bruno Amorim Title: Spectral and transport properties of Weyl semimetals with vaccancies

11:55 – 12:30 Invited: Sebastian Diehl Title: Measurement induced phase transitions: from theory to observability

12:30 Lunch break

15:00 – 16:00 Invited Colloquium: Didier Poilblanc Title: Chiral spin liquids with PEPS: should we fear the no-go theorem?

16:00 – 16:20 Contributed: Henrique P. Veiga Title: Simulation of diffusive transport in mesoscopic disordered nano-ribbons

16:20 – 16:45 Coffee break

16:45 – Poster presentations (2 minutes each) and poster session (Poster frame size: 180cm height from the ground x 120cm width)

# Friday, 6 October

9:00 – 9:35 Invited: Hai-Qing Lin Title: Excitations, spin-charge separation, and correlation function

9:35 – 9:55 Contributed: Ricardo Oliveira Title: Incommensurability-induced enhancement of superconductivity in one dimensional critical systems

9:55 – 10:30 Invited: Pedro Vianez Title: Quadratic heat capacity and high-field magnetic phases of V5S8

10:30 – 10:55 Coffee break

10:55 – 11:30 Invited: Xi-Wen Guan Title: Quantum simulators of many-body phenomena with integrability

11:30 – 11:50 Contributed: Goran Nakerst Title: Quantum-classical correspondence and ETH in Bose-Hubbard systems

11:50 – 12:10 Contributed: Hetényi Balázs Title: Binder cumulants for a quantum geometric phase: finite size scaling and the modern theory of polarization

12:10 – 12:25 Summary and closing remarks