

Session Program

22-26 Jun 2026



SCALES 1st General Meeting - Superfluid Condensates in Astrophysics and Laboratory Experiments

1st afternoon session

Physics Department, University of Coimbra
Rua Larga, 3004-516 - Coimbra - Portugal

Tuesday 23 June

14:30

1st afternoon session

Session | **Location:** Physics Department, University of Coimbra, Rua Larga, 3004-516 - Coimbra - Portugal |
Convener: Dario Ballarini

14:30–15:20

Quantum turbulence in a Bose gas close to an anomalous non-thermal fixed point

Speaker

Prof. Thomas Gasenzer

15:20–15:45

Beyond the thousands: Lessons from simulating a neutron star with 10^5 quantized vortices

Speaker

Anantharaman Viswanathan

15:45–15:50

Modeling neutron star glitches triggered by superfluid vortex avalanches

Speaker

Alessandro Costanzo

15:50–15:55

Quantum many-body physics of ultracold Fermi gases on a spherical surface

Speaker

Lorenzo Frigato

15:55–16:00

Performance and Dynamics of an Ultracold Atomic Superfluid as a Quantum Engine Working Fluid

Speaker

Henry Harper-Gardner

16:00–16:05

Interactive 3D Particle-In-Cell Simulation of a Global Pulsar Magnetosphere

Speaker

Armin Vahdat

16:05–16:10

Probing the Stability of Neutron Star Magnetic Fields through Configurational Entropy

Speakers

Brynmor Haskell, Davide Castellani

16:10