Session Program

7–11 Dec 2026



26th Australian Institute of Physics Congress and the Australian and New Zealand Conference on Optics and Photonics

AIP QST: Quantum fluids & Bose-Einstein condensates

The University of Sydney , Belinda Hutchinson Building
Abercrombie St & Codrington St NSW 2008

Thursday 10 December

11:00

AIP QST: Quantum fluids & Bose-Einstein condensates

Session |
Location: The University of Sydney , Belinda Hutchinson Building, Abercrombie St & Codrington St NSW 2008

11:00–11:15

Dark-state phase transition to a dark soliton in a dissipative Bose–Hubbard chain

Speaker
Prof. Matthew Davis

11:15–11:30

Applicability of conventional hydrodynamics to finite-temperature 1D Bose gases

Speaker
Carsten Dittrich

11:30–11:45

Creating edge states of vortex lattices in Bose-Einstein condensates

Speaker
Mason Clarke

11:45–12:00

Geometry-Enhanced Lifetime of Bogoliubov Modes in Ring Bose–Einstein Condensates

Speaker
Lachlan Miller

12:00–12:15

A Universal Description of the Critical Vortex Nucleation Velocity in Superfluid Flow

Speaker
Maarten Christenhusz

12:15–12:30

Two-Photon Quantum Polarimetry with Entanglement for Tissue-like Scattering Media

Speaker
Andrey A. Sukhorukov

12:30