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 error correction under realistic noise

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

Wednesday 9 December

11:00

AIP QST: Quantum error correction under realistic noise

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

11:00–11:15

Scalable quantum error correction tailored for a heavy-hex qubit array

Speaker
Campbell McLauchlan

11:15–11:30

Non-Clifford Crosstalk Noise in Surface Codes Using Hybrid Stabilizer-Tensor Network Methods

Speaker
Ben Harper

11:30–11:45

Overhead of quantum error correction with biased-noise qubits

Speaker
Dr Thomas Smith

11:45–12:00

Spatiotemporal Pauli processes: an operational framework for correlated noise in quantum error correction

Speaker
John Kam

12:00–12:15

Surface Code Transversal CNOT Performance on a Trapped Ion Quantum Processor

Speaker
Spiro Gicev

12:15–12:30

Recovery Algorithm for Correlated Errors in Permutation-Invariant Quantum Codes

Speaker
Omprakash Chandra

12:30