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: Silicon spin qubits & cryogenic engineering

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

Wednesday 9 December

16:00

AIP QST: Silicon spin qubits & cryogenic engineering

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

16:00–16:15

How to make donor qubit arrays and highly enriched silicon 28 with ion implantation

Speaker
Prof. David Jamieson

16:15–16:30

Integrating Deterministically Implanted Donors with Control and Readout Electronics for Donor Spin Qubit Scalability

Speaker
Nathalie Hilbert

16:30–16:45

A quantum computing unit cell using hole spins in natural silicon

Speaker
Isaac Vorreiter

16:45–17:00

Superconducting vanadium silicide thin film and device formation in SiO2 and silicon-on-insulator

Speaker
Jeffrey McCallum

17:00–17:15

The effects of strain and electric fields on the quadrupole tensor of an individual Sb donor in a silicon device

Speaker
Evert Stolte

17:15–17:30

Magnetic Memory State Preparation for Memory Elements for Cryogenic Computing

Speaker
Catherine Pot

17:30