

Silicon Quantum Photonics

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Photonics is a promising approach to realising quantum information technologies. Silicon photonics is proving to be a compelling technology platform for the delivery of complex and compact quantum photonic circuits. In this talk, I will give an overview of silicon quantum photonics, highlighting recent achievements in chip-to-chip quantum communications, programmable quantum circuits, chip-based quantum simulations and routes to scalable quantum information processing.

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