24th Australian Institute of Physics Congress



Contribution ID: 738

Type: Talk (preferred)

Generation of Large-Scale Entanglement on Physical Quantum Devices

Monday 12 December 2022 15:00 (15 minutes)

We generate and verify entanglement in sizeable multiqubit states prepared on IBM Quantum superconducting devices. We report the detection of whole-device bipartite entanglement on a 65-qubit quantum device and genuine multipartite entanglement over all qubits of a 27-qubit quantum device.

Primary author: MOONEY, Gary (University of Melbourne)
Co-authors: HILL, Charles (The University of Melbourne); WHITE, Gregory; HOLLENBERG, Lloyd
Presenter: MOONEY, Gary (University of Melbourne)
Session Classification: Conference on Optoelectronic and Microelectronic Materials and Devices

Track Classification: COMMAD: COMMAD: Quantum computing and circuits