24th Australian Institute of Physics Congress



Contribution ID: 194

Type: Talk (preferred)

Quantum steering with vector vortex photon states with the detection loophole closed

Wednesday 14 December 2022 15:00 (15 minutes)

Quantum nonlocality is a resource that enables secure quantum information tasks. Steering nonlocality is a scenario where one party is in a secure location and another party is not. Here, we show detection-loophole-free quantum steering, using a vector-vortex state encoding.

Primary author: GHAFARI, Farzad (Griffith University)

Co-authors: Mr JOCH, Dominick (Griffith University); Dr SLUSSARENKO, Sergei (Griffith University); Dr TISCHLER, Nora (Griffith University); Dr SHALM, Lynden (NIST); Dr VERMA, Varun (NIST); Dr NAM, Sae Woo (NIST); Dr PRYDE, Geoff (PsiQuantum)

Presenter: GHAFARI, Farzad (Griffith University)

Session Classification: AIP: Quantum Science and Technology

Track Classification: AIP Congress: AIP: Quantum Science and Technology