24th Australian Institute of Physics Congress



Contribution ID: 281 Type: Poster

Nondegenerate internal squeezing: An all-optical, loss-resistant quantum technique for gravitational-wave detection

Tuesday 13 December 2022 18:45 (15 minutes)

The detection of kilohertz-band gravitational waves promises discoveries in astrophysics, exotic matter, and cosmology. We study how to theoretically improve future interferometric gravitational-wave detectors' kilohertz-band sensitivity which is limited by quantum noise.

Primary author: GARDNER, James

Co-authors: SLAGMOLEN, Bram; MCCLELLAND, David; YAP, Min Jet; CHUA, Sheon; ADYA, Vaishali

Presenter: GARDNER, James

Session Classification: Poster session

Track Classification: ANZCOP: ANZCOP: Quantum optics