



Contribution ID: 66

Type: poster

Towards low suspension thermal noise of cryogenic torsion pendulums with crystalline fibres

Thursday, 20 May 2021 16:23 (1 minute)

Suspension thermal noise is a significant noise source for torsion pendulums. Two ways to reduce it is to utilize cryogenic temperatures and crystalline fibres. We record our progress here in utilising both in tandem to achieve low suspension noise levels, with an eye on achieving high Q for use in Torsion Bar Antenna (TOBA), a proposed gravitational wave detector aimed at 0.1-10 Hz

Primary author: OOI, Ching Pin (The University of Tokyo)

Co-authors: TAKANO, Satoru (The University of Tokyo); MICHIMURA, Yuta (Department of Physics, University of Tokyo); ANDO, Masaki (University of Tokyo)

Presenter: OOI, Ching Pin (The University of Tokyo)

Session Classification: Poster session 2

Track Classification: Workshops: Cryogenics workshop