Contribution ID: 25

Type: Oral presentation

Status of the frequency dependent squeezing experiment at TAMA

Saturday, 16 February 2019 16:55 (20 minutes)

The generation of frequency dependent squeezing with ~100 scale filter cavities is a promising technique to obtain a broadband quantum noise mitigation in 2nd generation GW detectors and its implementation is planned in their near-term upgrade. At NAOJ, we are developing a 300 m filter cavity prototype in order to demonstrate squeezing angle rotation below 100 Hz, as required for an optimal noise reduction. The update on the experiment will be presented.

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Session Classification: R&D and new technologies