

Session Program

17-23 May 2026



GWADW2026 - Gravitational-Wave Advanced Detector Workshop

Quantum Noise

Hotel Hermitage, La Biodola, Isola d'Elba

Thursday 21 May

09:00

Quantum Noise

Session | **Location:** Hotel Hermitage, La Biodola, Isola d'Elba

09:00–09:18 **Mode mismatch is not loss: observing hyperloss obliterate squeezing**

Speaker

Dr Mikhail Korobko

09:18–09:36

Robust Generation of Frequency-Dependent Squeezing in the Presence of Mode Mismatch

Speaker

Byeong-Yoon Go

09:36–09:54

Birefringence-induced SQZ/anti-SQZ mixing in gravitational-wave interferometers

Speaker

Yuheng Ye

09:54–10:12

Bidirectional parametric readout: One crystal to produce squeezing and evade injection and detection losses

Speaker

Jonas Rittmeyer

10:12–10:30

Experimental demonstration of frequency-dependent squeezing based on quantum teleportation

Speaker

Ryo Iden

10:30

11:00

Quantum Noise

Session | **Location:** Hotel Hermitage, La Biodola, Isola d'Elba

11:00–11:18

Balanced homodyne detection design and application at the AEI 10m Prototype sub-SQL interferometer

Speaker

Matteo Carlassara

11:18–11:36

Quantum experiments for future gravitational wave detectors

Speaker

Robert Ward

11:36–11:54

Optimizing Frequency-Dependent Quantum Squeezing for Next-Generation Gravitational-Wave Detectors

Speaker
Isander Ahrend

11:54-12:12

Quantum-Enhanced Optical Spring via Intracavity Signal Amplification for High-Frequency Detection

Speaker
Mr Kaido Suzuki

12:30