

## **Session Program**

**17-23 May 2026**



# **GWADW2026 - Gravitational-Wave Advanced Detector Workshop**

## ***Exploring New Directions***

Hotel Hermitage, La Biodola, Isola d'Elba

## Friday 22 May

09:00

### Exploring New Directions: Future Techniques for Next Generation Detectors

**Session** | **Location:** Hotel Hermitage, La Biodola, Isola d'Elba | **Conveners:** Hartmut Grote, David Ottaway

09:00-09:18

#### StrainForge: A Benchmark for the Computational Design of Gravitational Wave Detectors

**Speaker**

Jonathan Klimesch

09:18-09:36

#### Current status of TOSion Bar Antenna experiment

**Speaker**

Tatsuya Sugioka

09:36-09:54

#### Bidirectional Internal Squeezing for Gravitational-Wave Detectors

**Speaker**

Dr Sander M. Vermeulen

09:54-10:12

#### Gingin Technology Demonstrator and Future ~kHz Gravitational Wave Detectors

**Speaker**

Carl Blair

10:12-10:30

#### Multiparameter quantum limits in realistic gravitational-wave detectors

**Speaker**

Jacques Ding

10:30

11:00

### Exploring New Directions: GW Techniques for other Physics Experiments

**Session** | **Location:** Hotel Hermitage, La Biodola, Isola d'Elba | **Conveners:** Hartmut Grote, David Ottaway

11:00-11:18

#### Proposal for a unified optomechanical platform for high-frequency gravitational wave and vector dark matter detection

**Speaker**

David Rousso

11:18-11:36

#### Magnetically levitated resonators with low mechanical loss for quantum sensing

**Speaker**

Shilu Tian

11:36-11:54

#### Beyond the ALPS II Experiment: An Interferometric Test-bed for Fundamental Particle Physics and High-Frequency Gravitational Waves

**Speaker**  
Todd Kozlowski

11:54-12:12

**Sensitivity improvement of Dark matter Axion search with riNg Cavity Experiment (DANCE)**

**Speaker**  
Hinata Takidera

12:12-12:30

**Testing the quantum nature of gravity with levitated mirrors**

**Speaker**  
Yuta Michimura

12:30