



# GWADW2023 - Gravitational-Wave Advanced Detector Workshop

## martedì 23 maggio 2023

**Tuesday Poster session (18:00 - 19:30)**

[id] title	presenter	board
[8] Predicting the motion of a high-Q pendulum subject to seismic perturbations using machine learning	HARTWIG, Daniel	
[14] Laser Welding the 100 g Mirrors for the AEI 10 m Prototype Suspensions with Micrometer Precision	VON WRANGEL, Juliane	
[22] Instrumented baffles for Advanced Virgo +	MACQUET, Adrian	
[29] A direct mode mismatch sensing scheme between the recycling cavities and arms.	Dr. GOODWIN-JONES, Aaron	
[31] Vibration attenuation system for a cryogenic Coating Thermal Noise measurement setup	PORCELLI, Enrico	
[18] Astigmatic mode mismatch sensing for the next gravitational wave detectors	PERRECA, Antonio	
[27] Torsion-Bar Antenna and its Angular Sensor	Sig.na OSHIMA, Yuka	
[32] Optical simulations for the aberration control in VnEXT	LORENZINI, Matteo	
[21] LIDA: A Detector for Axions and a Testbed for GW Detectors	GILL, Alex	
[23] Coating thermal noise mitigation through multi mode readout	ZHANG, Jue	
[24] Optical resonator-based precision displacement sensing using GHz phasometers	Sig. CHALATHADKA SUBRAHMANYA, Shreevathsa	
[3] Stabilized laser system at 1550 nm wavelength for the ET-LF interferometers	MEYLAHN, Fabian	
[9] Bright Squeezed Light Generation and Quantum Correlation Measurements	VENNEBERG, Jasper	
[26] Study and mitigation of the Virgo air conditioning system noise	Dr. TRINGALI, Maria Concetta	
[4] A Novel Bipolar Passive Charge Management System for Contactless Test Masses Using Slow Photoelectrons	BUCHMAN, Saps	
[13] Compact Optical Vault Grade Inertial Sensors.	CARTER, Jonathan	
[5] Characterization of heterodyne phase locking for a Newtonian force sensor	KULUR RAMAMOCHAN, Avanish	
[1] Squeezed light for the low-frequency interferometers of ET	MEYLAHN, Fabian	
[38] Single frequency thulium fibre lasers between 1900nm and 2050nm	BOLINGBROKE, Georgia	
[97] Development of the optical lock-in phase camera	SCHIWORSKI, Mitchell	
[40] Mechanical and Optical Design of TCS Test Facility	SIMMONDS, Madison	
[69] Methods for Cryogenic Mechanical Loss Measurements	MERENI, Lorenzo	
[65] IBS TiO <sub>2</sub> :GeO <sub>2</sub> single layer and HR stacks coating Q measurements and modelling	MCGHEE, Graeme	
[47] Mechanical and Optical Characterization of sputtered amorphous GaN thin film for high reflectivity and low-loss coatings	LUMACA, Diana	
[76] Juggled interferometer for gravitational wave detection	Sig.na WU, Bin	

<b>[50] Test facility for experimental investigations of the He-II based ET-LF payload cooling concept</b>	KOROVESHI, Xhesika	
<b>[52] Development status of the inner thermal shielding for the ET-LF cryogenic payloads</b>	BUSCH, Lennard	
<b>[44] Towards a NEMO prototype</b>	Dr. GOODWIN-JONES, Aaron	
<b>[100] The statics of the maraging blades in SuperAttenuators: simulation and tests</b>	CHESSA, Piero	
<b>[98] Observation and interpretation of bichromatic thermal detuning in Virgo filter cavity</b>	ZHAO, Yuhang	
<b>[54] A study of suspensions with flexures in compression for cryogenic mirrors</b>	ZEOLI, Morgane	
<b>[51] SPARSE: a high performance scatterometer with imaging ability</b>	BOLLIAND, Adrien	
<b>[72] OctoPyus: a package to simulate seismic isolation systems for the third-generation Gravitational Wave detectors</b>	RAZZANO, Massimiliano	
<b>[93] The crystallization process in amorphous Ta2O5 thin films.</b>	Dr. FAVARO, Giulio	
<b>[80] Exploring the Mass of Gravitons through Strong Lensing in the Next Generation of Gravitational Wave Detectors</b>	GENG, Shuaibo	
<b>[33] Mitigation of non-axisymmetric optical aberrations in Advanced Virgo plus</b>	TARANTO, Claudia	
<b>[99] Detuning the signal recycling cavity in AdV+</b>	DING, Jacques	
<b>[95] Upgrades of the reference actuator for the calibration of Advanced Virgo+</b>	LAGABBE, Paul	
<b>[43] Jiggled interferometer for ground-based low-frequency gravitational wave detector</b>	IWAGUCHI, Shoki	
<b>[88] Mode matching sensing through RF Higher Order Modulation method</b>	CHIARINI, Gabriella	
<b>[59] Mode mismatch impact on squeezed light in ET</b>	KOROBKO, Mikhail	
<b>[75] Towards birefringence mitigation</b>	EISENMANN, Marc	
<b>[46] Low energy electrons to neutralize electrostatic charges on cryogenic test mass mirrors.</b>	CIMINO, Roberto	
<b>[79] The Gravitational Wave Sky Simulator: a new package for fast simulations of gravitational wave sources</b>	PAPALINI, Lucia	
<b>[82] Gravitational Wave Data Manager – A Python package for managing multichannel gravitational wave data</b>	PALAIÀ, Maria Antonietta	
<b>[90] Sensitivity optimization method for DECIGO: Combination of multiple detector outputs using the square completion method</b>	ISHIKAWA, Tomohiro	
<b>[92] Dark matter Axion search with riNg Cavity Experiment DANCE: Latest optical system and sensitivity</b>	FUJIMOTO, Hiroki	
<b>[83] Alignment Sensing and Control of Laser Interferometer for DECIGO and B-DECIGO</b>	ONO, Masaya	
<b>[49] Current status of experiments to verify the principle of quantum locking for DECIGO</b>	KAWASAKI, Yuki	
<b>[96] Quantum Noise Reduction in Gravitational Wave Detector DECIGO by Quantum Locking including Cavity Detuning and Homodyne Detection</b>	TSUJI, Kenji	
<b>[78] An Interferometric Instrument for the Determination of Spectral and Angular Dependence of Back-reflected Light from Smooth Optical Surfaces</b>	KHAN, Imran	
<b>[71] Treatment of Vacuum Fields in Cavity with Diffraction Loss for Space Gravitational Antenna DECIGO</b>	UMEMURA, Kurumi	
<b>[55] Technological demonstrators towards the OGSE for the LISA mission</b>	Dr. NARDELLO, Marco	

<b>[57] Practical quantum noise estimate of optical-spring quantum locking for space gravitational wave detector DECIGO</b>	SHIMIZU, Ryuma	
<b>[81] Machine learning for glitches classification in Advanced Virgo O3</b>	VACATELLO, Michele	
<b>[86] Scattered light noise from suspended optics in Virgo and LIGO Hanford</b>	POLINI, Eleonora	
<b>[111] Towards a monolithic suspension for the Einstein Telescope: crystalline silicon welding</b>	PIERGIOVANNI, Francesco	
<b>[122] Balanced Homodyne Readout at the 40m Prototype Interferometer</b>	ARAI, Koji	
<b>[101] Faraday isolators for future gravitational-wave detectors - Characterization of a commercial isolator at 2052 nm and plans for Voyager.</b>	MARTIN, Rodica	
<b>[103] The Low-Frequency frontier. Exploring the impact of low-frequency sensitivity on the detection of transient sources</b>	RAZZANO, Massimiliano	
<b>[128] Cryogenic payload prototype at ARC</b>	MAJORANA, Ettore	
<b>[105] Compact displacement sensors using Deep-Frequency Modulation Interferometry</b>	GERBERDING, Oliver	
<b>[123] First demonstration of neural sensing and control in a kilometer-scale gravitational wave observatory</b>	ANDRIC, Tomislav	
<b>[106] Experimental validation for low frequency isolation of six degree of freedom systems using inertial sensors</b>	LAKKIS, Mouhamad Haidar	