

IFD 2025 - INFN Workshop on Future Detectors

Monday, 17 March 2025

Quantum sensors and technologies (16:30 - 18:15)

-Conveners: Federica Mantegazzini; Jean-Pierre Zendri

time	[id] title	presenter
16:30	[110] Superconducting circuits for quantum sensing: an overview	MANTEGAZZINI, Federica
16:40	[108] Amplification-Free System for High-Resolution Josephson Junctions' Characterization	FAGGIONATO, Marcello Filippo
16:45	[71] Development and Analysis of Transmon Qubits for Quantum Sensing applications	LABRANCA, Danilo
16:52	[70] Superconducting circuits in axion dark matter search: microwave photon counting with transmon qubits	BRAGGIO, Caterina
17:02	[21] Next Generation Quantum Detectors for Low Energy Astroparticle Physics (QuLEAP)	Dr PAOLUCCI, Federico
17:12	[109] Kinetic inductance circuits for quantum sensing	BOGONI, Enrico
17:19	[60] Photon Number-Resolving Detectors for Integrated Quantum Sensing	Mr LIMONGI, Leonardo
17:24	[49] Superconducting detectors for frontier physics	DE LUCIA, Mario
17:29	Discussion	
17:35	[111] Quantum noise reduction in GW detectors: an overview	ZENDRI, Jean-Pierre
17:45	[23] Einstein-Podolsky-Rosen quantum entanglement for future gravitational-wave detectors	DE MARCO, Francesco
17:52	[69] Quantum Back-Action Evasion for Future Gravitational Wave Detectors	GRIMALDI, Andrea
17:59	[10] Entangled Squeezed Light for Quantum Noise Reduction in Small-Scale suspended Interferometers	ALI, Wajid
18:06	Discussion and Conclusion	