

Quantum Sensors for HEP

Thursday, April 27, 2023

Hybrid town hall 2: Dark particles, phonons, optomechanics, sensor arrays - Yale Quantum Institute / Wright Laboratory (3:50 PM - 5:00 PM)

time	[id] title	presenter
3:50 P	[102] Exploiting the Physics of the Field for Compute-in-Sensor	LEONARD, Francois
3:55 P	[103] Understanding and Mitigating quasi-particle excess due to phonons and IR produced by stress relaxation	PYLE, matt
4:00 P	[104] Material science of quantum sensors	PEREVERZEV, Sergey
4:05 P	[105] Sapphire substrate qubits for low mass Dark Matter searches	KHATIWADA, Rakshya
4:10 P	[106] Optical Strain Sensing for Particle Detection	TEMPLES, Dylan
4:15 P	[107] Closing the Loop on Quantum Research with Skipper-CCDs: DOE-OHEP's Contribution to Advancements in Quantum Sensing	TIFFENBERG, Javier
4:20 P	[108] Nuclear decays with mechanical quantum sensors	CARNEY, Daniel
4:25 P	[109] The Windchime Project	LANG, Rafael
4:30 P	[110] Back action evasion and quantum noise reduction in quantum magnetometers for particle and field detectors	MARVINNEY, Claire
4:35 P	[111] Quantum Enhanced Detection of Quantum Fields and Particles through Networked Entangled Sensors	MARINO, Alberto
4:40 P	[112] Entanglement-enhanced optomechanical dark matter detectors	WILSON, Dalziel
4:45 P	[114] Rydberg atoms as single-photon detectors for axions	MARUYAMA, Reina
4:50 P	[115] Noble and Alkali Spin Detectors for Ultralight Coherent dark matter (NASDUCK)	BLOCH, Itay