

CPAD Workshop 2022

Tuesday, 29 November 2022

WG4: Quantum and Superconducting Detectors - Theater (13:30 - 15:30)

-Conveners: Michael Jewell; Cristián Peña

time	[id] title	presenter
13:30	[158] Superconducting Nanowire Single Photon Detectors	SHAW, M . D
13:50	[25] Quantum Capacitance Detectors with sub-eV resolution for astroparticle applications	RAMANATHAN, Karthik
14:10	[78] The Quantum Capacitor Detector – counting single photons in the far-infrared	ECHTERNACH, P.M.
14:30	[176] Superconducting Nanowire Single Photon Detectors for sub-GeV Dark Matter Searches	LUSKIN, J
14:50	[166] Excess backgrounds in dark matter searches and superconducting photon detectors	PEREVERZEV, Sergey

Wednesday, 30 November 2022

WG4: Quantum and Superconducting Detectors - Theater (08:30 - 10:10)

-Conveners: **Cristián Peña; Michael Jewell**

time	[id] title	presenter
08:30	[74] Spectrometer based on SPAD linear array with sub-nanosecond timing resolution and single photon sensitivity for quantum-assisted optical interferometers.	NOMEROTSKI, Andrei
08:50	[134] Novel Light-Field Imaging Device with Enhanced Light Collection for Cold Atom Clouds	CHEONG, Sanha
09:10	[138] Highly-charged Ion Atomic Clock and Ultra-light Dark Matter	WORM, Steven
09:30	[79] Quantum Entangled Network of Magnetometers	MARTINEZ-RINCON, Julian

WG4: Quantum and Superconducting Detectors - Lecture Hall 2 (13:35 - 15:35)

-Conveners: **Michael Jewell; Cristián Peña; Julian Martinez-Rincon**

time	[id] title	presenter
13:35	[20] Stress Induced Backgrounds in Cryogenic Crystal Calorimeters	ROMANI, Roger
13:55	[84] BREAD Gigahertz Pilot: A reflector-based search for the dark photon and the axion	HOSHINO, Gabriel
14:15	[45] Leveraging Quantum Sensors for Dark Matter Detection	BAXTER, Daniel
14:35	[152] Extending the Reach of Dielectric Haloscopes	KOPPELL, Stewart
14:55	[37] Searching for axions and dark photons with superconducting nanowire single photon detectors (SNSPDs) in the BREAD experiment	WANG, Christina PEÑA, Cristián
15:15	[50] Progress Towards HeRALD: The Helium Roton Apparatus for Light Dark Matter	PINCKNEY, Doug

Thursday, 1 December 2022

WG4: Quantum and Superconducting Detectors - Lecture Hall 2 (10:35 - 12:35)

-Conveners: Julian Martinez-Rincon; Cristián Peña; Michael Jewell

time	[id] title	presenter
10:35	[68] Transition edge sensor developments for the TESSERACT project	LI, Xinran
10:55	[80] Measuring Quasiparticle Diffusion in Superconducting Al Films with a TES and Microscopic Laser-Scanning Technique	OSTERMAN, David
11:15	[116] Results of a prototype TES detector for the Ricochet experiment	CHAPLINSKY, Luke
11:35	[140] GeSiSn nano-structures for HEP and QIS detectors	Dr ZAJAC, Joanna CULTRERA, luca
11:55	[119] Phonon-mediated kinetic inductance detectors for low mass dark matter searches	WEN, Osmond
12:15	[142] Optimizing MKIDs for Future Millimeter Wavelength Cosmological Surveys	PAN, Zhaodi