



# 2019 Meeting of the Division of Particles & Fields of the American Physical Society

## Monday 29 July 2019

### Dark Matter - West Village G 102 (14:00-15:30)

-Conveners: Lindley Winslow; Benjamin Safdi; Rupak Mahapatra

time	[id] title	presenter
14:00	[8] Dark photons in the decay of a scalar particle	Dr KOZLOV, Gennady
14:17	[15] The Light Dark Matter eXperiment, LDMX	MANS, Jeremy
14:34	[281] Detecting Light, High-Energy, Low-Interacting Particles with FASER	ROSE SHIVELY, Savannah
14:51	[383] Searching for dark photons with PADME	FRANKENTHAL, Andre
15:08	[264] The Heavy Photon Search Experiment	BRAVO, Cameron

### Dark Matter - West Village G 102 (16:00-18:00)

-Conveners: Lindley Winslow; Benjamin Safdi; Rupak Mahapatra

time	[id] title	presenter
16:00	[48] Dark Matter, Galactic Dynamics, and Gaia	MOSCHELLA, Matthew
16:17	[304] Studying the influence of the void environment on the ratio of dark matter halo mass to stellar mass in SDSS MaNGA galaxies	Prof. DEMINA, Regina
16:34	[277] Shapes of Self-Interacting Dark Matter	PARIKH, Aditya
16:51	[437] Electroweak Symmetric Dark Matter Balls	JAIN, Bithika
17:08	[143] Exotic Compact Objects in a Dissipative Dark Sector	CHANG, Jae Hyeok
17:25	[308] Fast and improved cosmic ionization/thermal history including dark matter energy injection	RIDGWAY, Gregory
17:42	[294] New Aspects of Millicharged Dark Matter at 21-cm	LIU, Hongwan

## Tuesday 30 July 2019

### **Dark Matter - West Village G 102 (14:00-15:30)**

**-Conveners: Rupak Mahapatra; Lindley Winslow; Benjamin Safdi**

time	[id] title	presenter
14:00	[105] Evidence against the decaying dark matter interpretation of the 3.5 keV line from blank sky observations	DESSERT, Christopher
14:17	[219] Dark Matter Indirect Detection with the GAPS Experiment	XIAO, Mengjiao
14:34	[238] Strong constraints on keV-scale sterile neutrinos with NuSTAR	Mr ROACH, Brandon
14:51	[149] Constraining Dissipative Dark Matter Self-Interactions	ZHONG, Yiming
15:08	[293] Dark Matter self-interactions in Milky Way dSphs	VALLI, Mauro

### **Dark Matter - West Village G 102 (16:00-18:00)**

**-Conveners: Lindley Winslow; Rupak Mahapatra; Benjamin Safdi**

time	[id] title	presenter
16:00	[18] DarkSide-50 Results and the Future Liquid Argon Dark Matter Program	WANG, Yi
16:17	[202] The Most Recent Results of the LUX Dark Matter Experiment	Prof. SZYDAGIS, Matthew
16:34	[203] Neutron and $\gamma$ Backgrounds in the LUX-ZEPLIN Dark Matter Detector	RISCHBIETER, Gregory
16:51	[241] Cleaning LZ: getting rid of unwanted backgrounds	Prof. LEVY, Cecilia
17:08	[424] Astroparticle Physics with a Generation-3 Liquid Xenon Detector	LANG, Rafael
17:25	[313] Estimating Si-32 and tritium in the SuperCDMS SNOLAB detectors	ORRELL, John
17:42	[139] Dark Matter search results from DAMIC at SNOLAB	Mr PIERS, Alexander

## Wednesday 31 July 2019

### Dark Matter - West Village G 102 (14:00-15:30)

**-Conveners: Rupak Mahapatra; Benjamin Safdi; Lindley Winslow**

time	[id] title	presenter
14:00	[151] Constraints on Axion Dark Matter from Searches for Radio Signals at Neutron Stars	FOSTER, Joshua
14:17	[153] Recent Results of the Axion Dark Matter Experiment (ADMX)	Dr WESTER, William
14:34	[230] CAPP-8TB: Search for Axion Dark Matter in a Mass Range of 6.62 to 7.04 $\mu\text{eV}$	Dr LEE, Soohyung
14:51	[258] The Search for Low-Mass Axions with ABRACADABRA-10cm: Results from the First Run	Dr OUELLET, Jonathan
15:08	[177] The Search for Low-Mass Axions with ABRACADABRA-10cm: Preparations for Run 2	SALEMI, Chiara

### Dark Matter - West Village G 102 (16:00-18:00)

**-Conveners: Rupak Mahapatra; Benjamin Safdi; Lindley Winslow**

time	[id] title	presenter
16:00	[282] Axion-like dark matter search using ferromagnetic toroids	GRAMOLIN, Alexander
16:17	[265] Search for the Axion Dark Matter with the Cosmic Axion Spin Precession Experiment (CASPER)	AYBAS, Deniz
16:34	[297] Enhancing the sensitivity of Axion Dark Matter search using Dynamic Nuclear Polarization	ADAM, Janos
16:51	[266] Nanowire Detection of Photons from the Dark Side	CHARAEV, Ilya

# Thursday 01 August 2019

## Dark Matter - West Village G 102 (14:00-15:30)

-Conveners: Lindley Winslow; Rupak Mahapatra; Benjamin Safdi

time	[id] title	presenter
14:00	[133] Unification of the Standard Model and Self-Interacting Dark Matter in $[SU(5)*U(1)]^4$ GUT	Dr YAMADA, Masaki
14:17	[315] Direct Detection Signals from Absorption of Fermionic Dark Matter	MCGEHEE, Robert
14:34	[335] A sub-GeV dark matter model	Prof. DUTTA, Bhaskar
14:51	[272] Direct detection limits on sub-GeV Dark Matter from the DAMIC@Snolab experiment	RAMANATHAN, Karthik

## Dark Matter - West Village G 102 (16:00-18:00)

-Conveners: Rupak Mahapatra; Benjamin Safdi; Lindley Winslow

time	[id] title	presenter
16:00	[25] The Snowball Chamber: An Alternative Detection Method for Dark Matter	Mr MARTIN, Joshua
16:17	[109] HeRALD: Dark Matter Direct Detection with Superfluid 4He	PINCKNEY, Harold
16:34	[196] R&D towards hydrogen-doped LXe TPCs	MONTE, Alissa MONTE, Alissa
16:51	[345] LBECA: Sub-GeV Dark Matter Search with Xenon	CLARK, Michael Takashi
17:08	[442] Forecasting dark matter searches at next-generation direct detection experiments in light of astrophysical uncertainties: Method	BUCH, Jatan
17:25	[443] Forecasting dark matter searches at next-generation direct detection experiments in light of astrophysical uncertainties: Results	LEUNG, Shing Chau
17:42	[275] Strong New Limits on Light Dark Matter from Neutrino Experiments	CAPPIELLO, Christopher