Contribution ID: 92 Type: not specified

OSCURA in 10 Minutes

Tuesday, 9 July 2024 11:30 (15 minutes)

The Oscura experiment seeks to achieve unprecedented sensitivity in the search for low-mass dark matter particles using a \sim 10 kg detector array of silicon, ultra-low noise Skipper Charge Coupled Devices (CCDs) with a detection threshold of two electrons and a total exposure of 30 kg-year. Oscura will probe sub-Gev dark matter particles that interact with electrons, targeting dark matter-electron scattering for masses down to \sim 500 keV and dark matter absorption by electrons for masses down to \sim 1 eV.

Primary authors: CERVANTES VERGARA, Brenda Aurea; MARRUFO VILLALPANDO, Edgar (The University of Chicago); ESTRADA VIGIL, Juan (FNAL); SAFFOLD, Nathan (Fermi National Accelerator Laboratory); PEREZ, Santiago (Universidad de Buenos Aires)

Presenter: MARRUFO VILLALPANDO, Edgar (The University of Chicago)

Session Classification: Dark Sector Physics