Contribution ID: **111** Type: **Talk**

Christina Ignarra (SLAC): Overview and New Results from the LUX Experiment

Friday, 23 February 2018 08:30 (15 minutes)

The Large Underground Xenon (LUX) detector was a dual-phase xenon TPC with an active mass of 250 kg searching for Weakly Interacting Massive Particle (WIMP) dark matter via direct detection. It operated at the Sanford Underground Research Facility (SURF) in Lead, South Dakota from 2012-2016. This talk will report results from several new analyses: an effective field theory approach to explore a more general set of possible nuclear responses from WIMP-nucleon scattering, searches for annual and diurnal rate modulations in the data, and a search for the solar neutrino magnetic moment. New studies of calibrations, pulse-shape discrimination, and event reconstruction techniques will also be discussed.

Presenter: IGNARRA, Christina (SLAC)

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