

Abstract Submitted
for the TSF16 Meeting of
The American Physical Society

The MiniCLEAN Experiment JUI-JEN (RYAN) WANG, MICHAEL GOLD, Department of Physics and Astronomy , University of New Mexico, MINICLEAN COLLABORATION — The MiniCLEAN (Cryogenic Low-Energy Astrophysics with Noble liquid) dark matter experiment will exploit a single-phase liquid argon detector instrumented with 92 photomultiplier tubes placed in the cryogen with 4π coverage of a 500 kg (150 kg) target (fiducial) mass. The detector design strategy emphasizes scalability to target masses of order 10 tons or more. It is designed also for a liquid neon target that allows for an independent verification of signal and background and a test of the expected dependence of the WIMP-nucleus interaction rate. For MiniCLEAN, PMT stability and calibration are essential. The Light-Emitting Diode (LED) based light injection system provide single photon for the calibration which can be performed in near real-time, providing a continuous monitor on the condition of the detector. This talk will summarize the status of detector and upcoming commissioning at SNOLAB in Sudbury, Canada.

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Date submitted: 27 Aug 2016

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