

Abstract Submitted
for the APR14 Meeting of
The American Physical Society

Status of the MiniCLEAN Dark Matter Experiment THOMAS CALDWELL, University of Pennsylvania — The MiniCLEAN dark matter experiment is an ultra-low background single phase liquid argon and neon detector with a fiducial mass of 150 kg. The ability to exchange targets, the background rejection offered by noble liquids, and the scalability of the single phase approach allow MiniCLEAN to demonstrate the technologies required for the construction and operation of next generation multi-ton WIMP dark matter and precision low-energy solar neutrino experiments. MiniCLEAN utilizes a modular design with cold photomultiplier tubes in a spherical geometry to maximize light yield which allows highly efficient rejection of nuclear recoils from electronic recoil backgrounds using pulse shape discrimination (PSD) techniques. To demonstrate the effective reach of single phase PSD, MiniCLEAN will be spiked with additional ^{39}Ar . MiniCLEAN's inner detector has recently completed construction underground at SNOLAB, and the detector is being commissioned for operation at room temperature under vacuum and with purified argon gas. An update on the inner detector commissioning and construction of the infrastructure to operate the detector in the liquid phase will be given.

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Date submitted: 10 Jan 2014

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