

Abstract Submitted  
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**Simulation of Backgrounds for the MiniCLEAN Dark Matter Experiment** STANLEY SEIBERT, University of Pennsylvania, DEAP/CLEAN COLLABORATION — The MiniCLEAN dark matter experiment is an ultra-low background liquid cryogen detector slated to begin operation at SNOLAB in 2011. The detector will have a fiducial volume of 150 kg of liquid argon for 2 years of data collection, to be followed by a liquid neon run. The ability to exchange the target material gives MiniCLEAN both competitive sensitivity to WIMP dark matter and also the opportunity to demonstrate the technologies required to build multi-ton neon detectors for precision solar neutrino measurements. I will discuss the major backgrounds for the MiniCLEAN experiment and report on progress in modeling these backgrounds in a full optical simulation of the detector. In addition, I will show the effects of our projected detector response and reconstruction performance on the background distributions.

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