

Abstract Submitted  
for the DNP06 Meeting of  
The American Physical Society

**Dark matter Experiment with Argon and Pulse shape discrimination (DEAP)** KEITH RIELAGE, Los Alamos National Laboratory, DEAP COLLABORATION — The Dark matter Experiment with Argon and Pulse shape discrimination (DEAP) exploits pulse-shape discrimination of scintillation light in liquid argon to provide background reduction required for a sensitive dark matter search. Currently, a 7-kg detector has been built (DEAP-1) and is being commissioned this fall at SNOLAB. A summary of the design of the detector and current status will be presented with emphasis on backgrounds to the dark matter search. Prospects of scaling this technology up in size to a future one ton detector will be discussed.

Keith Rielage  
Los Alamos National Laboratory

Date submitted: 23 Jun 2006

Electronic form version 1.4