

Abstract Submitted
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The DEAP-3600 Dark Matter Search THOMAS SONLEY, Queen's University, DEAP/CLEAN COLLABORATION — The DEAP-3600 experiment will search for dark matter particle interactions on liquid argon at SNOLAB, located 2 km underground in Sudbury, Ontario. A prototype detector (DEAP-1) with a 7-kg liquid argon target mass is currently operating underground for studies of background reduction and rejection including pulse-shape discrimination of beta/gamma events. The larger detector containing a total mass of 3600 kg of liquid argon is under construction. The target sensitivity to spin-independent scattering on nucleons of 10^{-46} cm² will allow an improvement in dark matter particle sensitivity by a factor of several hundred over current searches. The status of the experiment and construction at SNOLAB will be presented.

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