

Abstract Submitted
for the HAW14 Meeting of
The American Physical Society

DEAP-3600 Dark Matter Search at SNOLAB MARK BOULAY,
Queen's University, DEAP COLLABORATION — The DEAP-3600 experiment will search for dark matter particle interactions on 3.6 tonnes of liquid argon at SNO-LAB. The argon is contained in a large ultralow-background acrylic vessel viewed by 255 8-inch photomultiplier tubes. Very good pulse-shape discrimination has been demonstrated for scintillation in argon, and the detector has been designed for a total background budget, including (alpha,n) and external neutron recoils, surface contamination from ^{210}Pb and radon daughters, of 0.2 events per tonne-year, allowing an ultimate sensitivity to spin-independent scattering of 10^{-46} cm² per nucleon at 100 GeV mass. Installation of the detector is currently being completed at SNO-LAB. The status of the experiment and an overview of low background techniques employed will be presented.

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Date submitted: 01 Jul 2014

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