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DEAP-3600 Dark Matter Search with Argon

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The DEAP-3600 experiment will search for dark matter particle interactions on 3.6 tonnes of liquid argon at SNOLAB. 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 to allow control of (alpha,n) and external neutron recoils, and surface contamination from ^{210}Pb and radon daughters, allowing an ultimate sensitivity to spin-independent scattering of 10^{-46} cm^2 per nucleon at 100 GeV mass. The detector is expected to begin collecting low-background data in 2016; the current status of the experiment will be presented.

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