

Abstract Submitted  
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**A Search for Low Mass WIMPs with the CDMS Experiment** RAYMOND BUNKER, UCSB — The Cryogenic Dark Matter Search (CDMS) employs low-temperature detectors to search for interactions of WIMPs while discriminating against interactions of background particles. In this talk we present a new search for low-mass WIMPs performed with data taken during the final exposure at the CDMS shallow Stanford Underground Facility. The thresholds for measurement of recoil energy have been substantially lowered and are below 1 and 2 keV for Germanium and Silicon targets, respectively. These low thresholds improve sensitivities for WIMPs with masses less than about 10 GeV, but require detailed understanding of noise and background sources, which we discuss. A significant improvement on the current world sensitivity to the WIMP-nucleon cross section for low WIMP masses is expected.

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