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Final results of a Dark Matter Search with the Silicon Detectors of the CDMS II Experiment and future results from SuperCDMS Soudan

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Weakly Interacting Massive Particles (WIMPs) are a class of yet to be discovered particles hypothesized to be components of the non-baryonic dark matter content of the universe. A blind analysis of 140.2 kg-days of data revealed three WIMP-candidate events with an expected total background of 0.7 events. These data favor a WIMP+background hypothesis over the known-background-only hypothesis at the 99.81% confidence level, with the highest likelihood occurring at a WIMP mass of 8.6 GeV/c^2 and a WIMP-nucleon cross section of 1.9x10^-41 cm^2. In this talk I will discuss these results and the additional investigations that have been ongoing. I will also discuss the most up-to-date results from the ongoing SuperCDMS at Soudan experiment, which has been running since March 2012. This experiment consists of 15 of the new iZIP detectors with a total mass of 9 kg, and should be able to probe the CDMSII-Si favored region.

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