

Cryogenic Dark Matter Search Status and Plans

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The Cryogenic Dark Matter Search Experiment (CDMS) operated cryogenic Ge and Si detectors at sub 50 mK in the Soudan Underground Laboratory for years, searching for the evidence of interactions between Weakly Interacting Massive Particles (WIMPs) and ordinary matter. The cryogenic detectors measure the ionization and phonon signals from the interactions between incoming particles and the detector. Excellent electromagnetic background discrimination was achieved using the ionization yield and phonon pulse shape parameters. Detector performance and Soudan low-background environment allowed CDMS to provide the leading sensitivity for WIMP-nucleon interactions for most of the past decade.

A summary of recent CDMS results will be discussed in this talk. Future plans, with emphasis on the development of larger Ge detectors, will also be discussed.