

WIMP Searches with the SuperCDMS Experiment

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Astrophysical observations indicate that approximately 85% of the matter in the universe consists of invisible, non-baryonic dark matter. A well-motivated candidate for this dark matter is the Weakly Interacting Massive Particle (WIMP). The SuperCDMS Soudan experiment is a direct-detection experiment aimed at searching for rare WIMP-nucleon interactions using a 9-kg array of germanium crystal detectors. SuperCDMS Soudan has collected 2.5 years worth of data from near-continuous operation since March of 2012, and has conducted low-mass WIMP searches using a subset of the dataset. I will present a brief overview of these previous low-mass searches, and the current status of our ongoing high-mass ($M > 15 \text{ GeV}/c^2$) WIMP search which utilizes the entire dataset.

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Yes

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No

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