

Abstract Submitted
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Dark matter search results from the first analysis of SuperCDMS Soudan low-threshold data KRISTIANA SCHNECK, Stanford University, SUPERCDMS COLLABORATION — Recent dark matter search results from CDMS-II Si, CoGeNT, CRESST-II, and DAMA may be interpreted to favor the existence of weakly interacting massive particles (WIMPs) with masses in the 6-20 GeV range. We report results from the first search for low-mass WIMPs from the SuperCDMS Soudan iZIP detectors. This dataset employs 7 germanium iZIP detectors with an analysis threshold of ~ 1.6 keVnr and a raw exposure of ~ 800 kg-days. We present the results of a blinded WIMP-search analysis of this exposure and the resulting constraints on the WIMP-nucleon cross-section.

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