

Abstract Submitted
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Recent Developments in the SuperCDMS Experiment BRADFORD WELLIVER, University of Florida, SUPERCDMS COLLABORATION — Recent research and development in the SuperCDMS collaboration have resulted in the design of advanced dark matter detectors, called iZIPs, that should provide greatly improved results compared to the CDMSII experiment. Preliminary studies of iZIPs in above ground laboratories have demonstrated very efficient surface-event rejection and much improved phonon channel information on an event by event basis. Details of how the iZIP functions will be presented with a focus on results from preliminary studies. SuperCDMS is currently operating 15 iZIP detectors in the Soudan underground laboratory. Our aim is to better constrain the cross-section limits for dark matter, while proving the true capabilities of the iZIP technology. Preliminary information on the detector performance will be mentioned.

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