

Abstract Submitted
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Design of the Next Generation SuperCDMS Detectors SCOTT HERTEL, MIT, SUPERCDMS COLLABORATION — While the the SuperCDMS collaboration deploys the first of its new “interleaved” (iZIP) detectors underground at the Soudan Mine, a concurrent effort is under way to design and test the next generation of detectors for a larger experiment at SNOLab. The detector design effort is focused on using larger 100mm diameter Ge crystals to increase the overall target mass to $\sim 100\text{kg}$ while retaining or even improving background rejection. We will discuss the current status of this effort, emphasizing fundamental design strategies and the results of relevant Monte Carlo simulations.

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