

Background Considerations for SuperCDMS

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Rejection and protection from backgrounds is a key issue for the next generation SuperCDMS SNOLAB experiment which will have a cross-section sensitivity of 9^{-46} cm² for spin-independent WIMP-nucleon interactions. We have identified ²¹⁰Pb as the dominant source of electromagnetic background seen in our detectors through a study that correlates the alpha and beta particles resulting from this decay. I will discuss details of this analysis and the methods of rejecting electromagnetic backgrounds possible with our new iZIP detectors currently operated in the Soudan Underground Laboratory. I will also comment on methods the collaboration is investigating to protect against neutron backgrounds in the next generation SuperCDMS experiment.

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