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Nuclear Recoil Background from Neutrons in a WIMP Search
RAUL HENNINGS-YEOMANS, Case Western Reserve University, CDMS COLLABORATION — Searches for the interactions of weakly interacting massive particles (WIMPs) must be performed underground to shield from cosmic rays. Cosmic rays can produce secondary particles, such as fast neutrons, which in turn can produce nuclear recoils that are very similar to a WIMP signal. This talk will present studies of the neutron-induced background for the Cryogenic Dark Matter Search (CDMS) experiment at the Soudan Underground Laboratory, based on accumulated data and Monte Carlo simulations, with special emphasis on the discovery potential of the current CDMS run. This talk will be the third of a sequence of four from CDMS.

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