

Abstract Submitted
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Simulation of Cosmogenic Background for Davis Cavern at Homestake Mine¹ CHAO ZHANG, DONGMING MEI, University of South Dakota — Davis Cavern at Homestake Mine is selected as the site for LUX and Majorana experiments. The local cosmogenic background will directly affect their target sensitivity. Detailed mountain profile and averaged rock composition are considered for muon attenuation from surface to the Davis Cavern. The muon energy spectrum is then used in a full Monte Carlo simulation to understand the cosmic ray muon induced background in the Cavern. We will present the simulated results in detail.

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