

Abstract Submitted
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Understanding and modeling the backgrounds for dark matter search at the South Pole with DM-Ice17 and DM-Ice¹ BETHANY REILLY, University of Wisconsin-Madison, DM-ICE COLLABORATION — DM-Ice17 is a NaI detector to search for annual modulation of dark matter signal. The detector was deployed in December 2010 at the geographic South Pole and has been in operation since January 2011. Geant4 is used to simulate and study the various backgrounds from materials in and surrounding the detector. I will present the comparison of the Geant4 simulation with data from DM-Ice17. I will also present the simulation of the projected backgrounds of the full-scale detector.

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Bethany Reilly
University of Wisconsin-Madison

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