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Results of DM-Ice17 and Prospects of the DM-Ice Experiment

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The DM-Ice experiment aims at the direct detection of annually-modulating WIMP (Weakly Interacting Massive Particle) dark matter signal using NaI(Tl) detectors. DM- Ice17, the first-generation detector with 17 kg of NaI(Tl), was deployed in the South Pole ice in December 2010 and has been successfully operated since then. R&D efforts for the quarter-tonne scale detector are well underway at the Yale Wright Laboratory and the Boulby Underground Laboratory in UK. I will present the experiment and the results of DM-Ice17 with more than three years of data. I will also discuss the science potential of the full-scale DM-Ice detector.

Oral or Poster Presentation

Oral

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