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DM-Ice: A search for dark matter at the South Pole

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I will discuss the DM-Ice experiment, a proposed detector for a direct dark matter search deep in the Antarctic ice at the South Pole. The goal of the experiment is to perform the first search for an annual modulation of the dark matter signal in the southern hemisphere, and thereby test the claim by the DAMA experiment that they have observed such a signal at the Gran Sasso National Laboratory in Italy. DM-Ice will use roughly 250 kg of low-background NaI detectors in the southern hemisphere where many of the environmental backgrounds associated with seasonal variations present in experiments in the northern hemisphere are either reversed in phase or absent altogether. A 17-kg prototype was deployed in December 2010 at the South Pole at the depth of $\sim$2200 m.w.e. as a feasibility study: it is now taking data. I will discuss the scientific reach, the status of the 17-kg detector, and the plans for the full-scale experiment.