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The IceCube DeepCore Detector LAURA GLADSTONE, University of Wisconsin, ICECUBE COLLABORATION — The IceCube Neutrino Observatory, located at the geographic South Pole, has an infill array called DeepCore in the core of its instrumented volume. To date, DeepCore has recorded well over 10⁵ neutrino interactions at energies of 10 to 300 GeV at trigger level. Analyzing signals in this energy range requires adjustments to standard IceCube tools, such as position and energy reconstruction and noise simulation. With these lower energies, the available science opportunities for IceCube include more sensitive studies of neutrino properties, including oscillations, and indirect dark matter searches from the Sun and Galactic Center. Atmospheric neutrino oscillations have been observed, and the current status of their ongoing study will be discussed.

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