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Neutrino Astrophysics with IceCube

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IceCube is a neutrino observatory in operation at the geographical South Pole. The main objective of IceCube is to conduct high-energy neutrino astronomy, including the search for the sources of cosmic rays. Neutrinos are detected by observing blue Cherenkov light from charged particles product of neutrino-matter interaction at or near the

detector. An array of 86 strings, each consisting of 60 digital optical modules (DOMs), monitors 1 gigaton of highly transparent ice at depths between 1450 m and 2450 m. IceCube has a nominal neutrino threshold of 1 TeV. A small group of strings have been installed with denser vertical and horizontal DOM density in the center and bottom part of the detector. This subarray, known as DeepCore, has a lower nominal threshold of 10 GeV. In this talk I will present an overview of the latest results from IceCube.

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