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Status of neutrino oscillation measurements with IceCube DeepCore

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Designed to observe neutrinos from astrophysical sources at TeV-PeV energies, IceCube and its DeepCore in-fill array also observe large numbers of atmospheric neutrinos down to a few GeV. Using these events, DeepCore can measure the "atmospheric" neutrino mixing parameters in an energy range higher than neutrino beam experiments and well above the tau lepton production threshold, making appearance and disappearance studies possible. Renewed calibration efforts have improved our knowledge of the detector and new developments in data analysis have significantly increased the statistics of our already large neutrino samples as well as our expected measurement precision. The status of these efforts will be discussed.

Collaboration name

IceCube

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