

Searches for Tau Neutrino Appearance in IceCube-DeepCore

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The IceCube-DeepCore detector has unambiguously observed muon-neutrino disappearance due to oscillations of atmospheric neutrinos. The associated tau-neutrino appearance may be measured as a statistical excess of cascade-like events in the detector. New high statistics event selections, optimized for the study of oscillations around 10 GeV, provide increased sensitivity for the measurement of muon neutrino disappearance as well as the potential for strong constraints on tau neutrino appearance. This talk will discuss the ongoing efforts to measure the tau neutrino appearance in the atmospheric neutrinos observed by the current DeepCore array.

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