

The 19th International Workshop on Neutrinos from Accelerators (NUFACT2017)



Contribution ID: 139

Type: **talk**

Tau Neutrino Appearance in IceCube

Friday, 29 September 2017 14:50 (13 minutes)

The DeepCore low energy extension of the IceCube Neutrino Observatory allows us to study atmospheric neutrino oscillations. With the ability to distinguish between track- and shower-like events, we can statistically look for the disappearance of muon neutrinos and simultaneously the appearance of tau neutrinos. This talk will present IceCube's analysis of the tau neutrino appearance rate using roughly three years of livetime. Such a measurement adds to the precision of existing tau neutrino appearance measurements by Super-K and OPERA, deepening our understanding of the tau sector of the PMNS matrix.

Primary author: ELLER, PHILIPP DAVID

Presenter: ELLER, PHILIPP DAVID

Session Classification: WG1: Neutrino oscillation physics

Track Classification: Working Group 1: Neutrino Oscillations