

Measurement of Neutrino Cross Section with IceCube using Earth Absorption

Saturday, 1 December 2018 14:00 (15 minutes)

The IceCube observatory located at the South Pole detects high energy neutrino's from atmospheric and astrophysics sources. Neutrinos are weakly interacting particles but at high energies neutrinos will be absorbed while traveling through the Earth. The Earth absorption can be used to fit for the neutrino cross section at TeV energies, well above accelerator measurements. A previous study published the results for one year of IceCube data, this new analysis will use 8 years of data reducing statistical errors and using improvements in the systematics.

Session

Works in Progress (15+5 min)

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