Contribution ID: **38** Type: **not specified**

Measurement of muon neutrino disappearance with NOvA

The NOvA long-baseline neutrino experiment consists of two totally active, segmented, liquid scintillator detectors located 14 mrad off Fermilab's NuMI beam axis, with a Near Detector located at Fermilab, and a Far Detector 810 km away. The NOvA experiment will measure theta(23) and delta m^2_(32) through the observation of muon neutrino and muon antineutrino disappearance. The analysis techniques that have been developed to perform this measurement will be discussed, specifically the prediction of the Far Detector rates as determined from the observed Near Detector data. The expected sensitivity that can be achieved with these methods will also be presented.

Primary author: Dr SUTER, Louise (Argonne National Lab)

Presenter: Dr SUTER, Louise (Argonne National Lab)

Track Classification: Neutrino Oscillation Physics