Contribution ID: **256** Type: **Poster accelerator**

First ν_μ + $\bar{\nu}_\mu$ Disappearance Results from the NOvA experiment

NOvA is a long-baseline neutrino oscillation experiment measuring ν_μ disappearance and ν_e appearance within the NuMI beam from Fermilab. The experiment uses a Near and a Far Detector placed 810 km away from each other and at 14 milliradians off the beam-axis resulting in an observed energy spectrum that peaks at 2 GeV, close to the oscillation maximum.

A combined ν_μ + $\bar{\nu}_\mu$ disappearance result will be presented including NOvA's first collected anti-neutrino data for a total exposure of 16×10^{20} protons-on-target which, in addition to an upgraded analysis, will enable the experiment to set new limits to the allowed regions for Δm^2_{32} and $\sin^2\theta_{23}$ and make a measurement of Δm^2_{32} among the world's best.

Authorship annotation

for the NOvA collaboration

Session and Location

Wednesday Session, Poster Wall #66 (Auditorium Gallery Right)

Poster included in proceedings:

yes

Primary author: MENDEZ, Diana Patricia (University of Sussex)

Presenter: MENDEZ, Diana Patricia (University of Sussex)

Track Classification: Poster (not participating in poster prize competition)