



Contribution ID : 502

Type : Oral presentation

Commissioning and Early Performance of the NOvA Detectors

Thursday, 3 July 2014 16:00 (13)

NOvA, the NuMI Off-Axis electron Neutrino Appearance experiment is designed to carry out studies of neutrino oscillation, characterized by the mixing angle θ_{13} . A complementary pair of detectors have been constructed roughly 14 mrad off the beam axis to optimize the purity of the electron neutrino signal at the far detector against neutral current backgrounds. The far detector is located 810 km from Fermilab, in Ash River, Minnesota. Both the 14 kton far detector and the near detector feature essentially fully active segmented liquid scintillator tracking volumes that provide fine grained event reconstruction. The first neutrinos to the Ash River site arrived in August 2014 while final construction and commissioning of the far detector was still underway. Final installation and initial commissioning of the near detector, located in the NuMI hall, took place in May 2014. Here, we describe the commissioning and early performance of the NOvA detectors, and preparations for first physics analyses.

Summary

Primary author(s) : Prof. MUSSER, Jim (Indiana university)

Presenter(s) : Prof. MUSSER, Jim (Indiana university)

Session Classification : Neutrino Physics

Track Classification : Neutrino Physics