

Calibration and Reconstruction in the NOvA Detectors

The NOvA long-baseline neutrino experiment will study electron neutrino appearance using two high-resolution, fully active scintillator detectors: a Near Detector at Fermilab and a Far Detector at Ash River MN. Precision measurements of neutrino oscillations with these detectors require careful calibration and sophisticated event reconstruction techniques. This poster presents the detector energy calibration scheme and discusses the strategy planned for the reconstruction of neutrino events. The performance of these routines will be demonstrated using cosmic and neutrino data collected in the Near Detector On the Surface prototype currently taking data at Fermilab.

Primary author: ARRIETA DIAZ, Enrique (Michigan State University)

Presenter: ARRIETA DIAZ, Enrique (Michigan State University)