Contribution ID: 34 Type: not specified

## Status of the NOvA Experiment

Tuesday, 20 August 2013 10:55 (25 minutes)

The NuMI Off-Axis  $\nu_e$  Appearance (\nova) experiment, currently under construction, is a long-baseline neutrino oscillation experiment optimized for the measurement of  $\nu_\mu \to \nu_e$  appearance. The experiment consists of two nearly identical fully-active liquid-scintillator tracking calorimeter detectors separated by 810 km and exposed to an upgraded 700 kW NuMI beam from Fermi National Laboratory. Goals of the experiment include measurements of  $\theta_{13}$ , resolution of the neutrino mass hierarchy, measurement of the CP-violating angle  $\delta_{\rm CP}$ , and the octant of the  $\theta_{23}$  mixing angle. This talk will provide an overview of the detectors, physics goals and sensitivities of the experiment, and a first look at commissioning data from the far detector.

**Primary author:** Dr PALEY, Jonathan (Argonne National Laboratory)

**Presenter:** Dr PALEY, Jonathan (Argonne National Laboratory)

Session Classification: WG1

Track Classification: Neutrino Oscillation Physics