

## Results from the NOvA Experiment

*Friday, 1 September 2017 16:30 (25 minutes)*

The NOvA experiment is a long-baseline accelerator-based neutrino oscillation experiment. It uses the upgraded NuMI beam from Fermilab to measure electron-neutrino appearance and muon-neutrino disappearance between the Near Detector, located at Fermilab, and the Far Detector, located at Ash River, Minnesota. The NuMI beam has recently reached and surpassed the 700kW power benchmark. NOvA's primary physics goals include precision measurements of oscillation parameters, such as  $\theta_{13}$ ,  $\theta_{23}$ , and the atmospheric mass-squared splitting, along with probes of the mass hierarchy and of the CP violating phase. This talk will present the latest NOvA results, based on a neutrino beam exposure equivalent to  $6.05 \times 10^{20}$  protons-on-target

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