

## NOvA in 10 minutes

*Tuesday, 11 June 2019 14:20 (15 minutes)*

The long-baseline neutrino oscillation experiment named NOvA is comprised of two detectors utilizing liquid scintillator tracking calorimeters. Both are positioned 14 mrad off-axis with respect to the NuMI beam with the near detector being at Fermilab. The far detector, at 14 kton, can be found approximately 810 km away in Ash River, Minnesota. The main physics goals of NOvA include, but are not limited to, the measurement of muon neutrino disappearance and electron neutrino appearance. This measurement will help resolve the mass hierarchy problem as well as put constraints on  $\theta_{23}$ , the large mixing angle and its octant, and the CP violating phase. The goal of this talk is to give a general description of the NOvA experiment and present the progress made on these physics goals thus far.

**Primary author:** ELKINS, Miranda (Iowa State University)

**Presenter:** ELKINS, Miranda (Iowa State University)

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