

A New Measurement of Neutrino Oscillations at NOvA

Thursday 18 July 2024 11:30 (15 minutes)

NOvA is a long-baseline neutrino oscillation experiment with a one megawatt beam and near detector at Fermilab and a far detector 810 km away in northern Minnesota. It features two functionally identical scintillator tracking calorimeter detectors. The near detector samples the beam before significant oscillations to allow the measurement of muon-neutrino disappearance and electron-neutrino appearance, and their antineutrino counterparts, at the far detector. These measurements are used to measure neutrino mass differences and the parameters of the PMNS mixing matrix. In this talk, results of a new analysis featuring double the neutrino-mode beam exposure are presented.

Alternate track

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Yes

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