

Determination of the neutrino oscillation parameters through the unified approach of Feldman and Cousins by the NOvA Experiment

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The NOvA experiment presents new measurements of the neutrino oscillation parameters obtained through a fit to data from the one megawatt NuMI neutrino beam in the NOvA detectors. The analysis uses muon-neutrino disappearance and electron-neutrino appearance in both neutrino and antineutrino beam polarities. With the addition of $\sim 100\%$ more neutrino-mode beam exposure over the previously reported results, this analysis employs the unified approach of Feldman and Cousins to determine the confidence level intervals for the oscillation parameters θ_{23} , δ_{CP} , and Δm_{32}^2 , for both neutrino mass orderings.

Poster prize

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