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NOvA recent results of three-flavor oscillation analysis

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The NOvA experiment is a long-baseline neutrino experiment designed to study the oscillation behavior of neutrinos and antineutrinos utilizing Fermilab's Megawatt-capable NuMI neutrino beam. NOvA has been collecting data for 10 years from two functionally identical tracking calorimeter detectors, which are situated off the NuMI beam axis and separated by 810 km. The experiment's construction allows us to observe muon (anti)neutrino disappearance and electron (anti)neutrino appearance. Therefore, we can obtain precision measurements of oscillation parameters, such as the mass splitting Δm_{32}^2 and the mixing angle θ_{23} , as well as get closer to understanding the matter-antimatter asymmetry in the universe. In this talk, an overview of the NOvA experiment and its latest results will be presented.

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