Latest results from the NOvA experiment

NOvA is a long-baseline neutrino oscillation experiment. Its fine granularity allows the detection and identification of particle interactions in the detectors, notably muon and electron neutrino interactions. Neutrinos produced by the NuMI beam are detected by a Near Detector, located at Fermilab, and a much larger Far Detector, located 810km away in Ash River, Minnesota. NOvA can measure the electron neutrino and antineutrino appearance rates, as well as the muon neutrino and antineutrino disappearance rates, in order to constrain neutrino oscillations parameters, including the neutrino mass hierarchy and the CP-violating phase δ_{CP} . This talk will present NOvA's latest results combining both neutrino data (13.6×10^{20} POT) and antineutrino data (12.5×10^{20} POT).

Summary

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