

Latest Results from the MINOS Experiment

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The Main Injector Neutrino Oscillation Search (MINOS) long baseline experiment measures a muon neutrino beam in two locations: a Near detector at Fermilab, close to beam production, and a Far detector, 735 km downstream, in Northern Minnesota. Comparisons of the observed energy spectrum at the Far detector with the expectation derived from the Near detector measurement allow MINOS to study neutrino oscillation processes with high precision. In this talk, the methodology employed in the analysis of charged-current muon neutrino and anti-neutrino interactions is outlined and the most recently obtained results are described. Results from a search for oscillations into sterile neutrinos, derived from the analysis of neutral current interactions in the MINOS detectors, are also presented. A beam exposure of 3.2×10^{20} protons on target is used in the analyses.

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