

An updated search for electron neutrino and antineutrino appearance in MINOS

MINOS is a long-baseline neutrino oscillation experiment situated along Fermilab's high-intensity NuMI neutrino beam. MINOS is capable of searching for muon neutrino to electron neutrino transitions, observations of which would indicate a nonzero value for the neutrino mixing angle θ_{13} . A new study will analyze an additional 3.4×10^{20} protons-on-target of mostly antineutrino data to look for the oscillation of muon antineutrinos to electron antineutrinos. A planned joint fit will also combine these antineutrino results with the full set of MINOS neutrino data, for the most sensitive MINOS measurement of θ_{13} to date. The latest results for this analysis will be presented.

Primary author: SCHRECKENBERGER, Adam (University of Minnesota)

Presenter: SCHRECKENBERGER, Adam (University of Minnesota)