

Abstract Submitted
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Neutrino Oscillations in MINOS¹ JASMINE MA, University of Texas at Austin, MINOS COLLABORATION — The MINOS experiment is a two detector experiment to study the phenomenon of neutrino oscillations, with the Near detector located at Fermilab, near Chicago and the Far detector located 734 km away, at the Soudan Underground Laboratory in Minnesota. A precision measurement of the neutrino oscillation parameters $\sin^2 \theta_{23}$ and Δm_{32}^2 can be accomplished using charged current neutrino events, which record both the neutrino flavor and energy. A deficit of events in the Far detector relative to that expected from the Near detector is seen, especially at low energy. In this talk we will discuss the neutrino oscillation measurement, the techniques utilized to select charged current events, as well as the expected backgrounds from neutral current neutrino scattering. Most recent results from a data set corresponding to 3.3×10^{20} protons on target will be given.

¹On behalf of the MINOS Collaboration

Jasmine Ma
University of Texas at Austin

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