

Abstract Submitted  
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**Progress Towards an Updated MINOS Oscillation Parameter Analysis** JASMINE RATCHFORD, University of Texas at Austin, MINOS COLLABORATION — MINOS is a long baseline neutrino oscillation experiment composed of two detectors on the NuMI beam. The MINOS detectors are located at Fermilab in Batavia, IL and in the Soudan Mine near Ely Mn, 734 km apart. The NuMI beam, which originates at Fermilab is composed mainly of muon neutrinos. The MINOS Charged Current Analysis measures the mixing parameters  $\sin^2 2\theta_{23}$  and  $\Delta m^2$  from  $\nu_\mu$  disappearance in the NuMI beam. The 2008 MINOS measurement was based on  $3.2 \times 10^{20}$  protons on the NuMI target. The next analysis will be based on an exposure of  $7.2 \times 10^{20}$  protons on target. This talk summarizes progress toward the 2010 measurement, including data-driven measurements of the NC background, and low energy efficiency improvements through new identification parameters. The next analysis will explore the inclusion both neutrinos and anti-neutrinos in the data sample, and the inclusion rock muon events.

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