

Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Measurement of the Atmospheric Muon Charge Ratio at TeV Energies with MINOS GAVRIL GIURGIU, Argonne National Lab, MINOS COLLABORATION — A measurement of the atmospheric muon charge ratio with the MINOS far detector is presented. The 5.4 kilo-ton MINOS far detector is located at a depth of 710 meters underground in the Soudan mine in Minnesota. It was designed to study neutrino oscillations with the Fermilab NuMI beam in conjunction with a near detector 1 km downstream of the NuMI target. The far detector has been taking charge-separated cosmic ray data since August 2003. We measure the atmospheric muon charge ratio for underground muon energies up to 250 GeV which corresponds to a surface energy range between 1 and 7 TeV.

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Date submitted: 11 Jan 2007

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