

Abstract Submitted
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Deep Inelastic Scattering Cross Section in MINOS¹ DEBDATTA BHATTACHARYA, University of Pittsburgh, MINOS COLLABORATION — The MINOS experiment, using the high-intensity NUMI beam, has been recording beam neutrino interactions in the near and the far detector since March 2005. The near detector data sample will have high statistics in the 1-30 GeV range. A measurement of charged-current neutrino deep inelastic scattering cross section using this sample will be discussed. The deep inelastic scattering cross section will allow a first measurement of the neutrino-iron structure functions in the low- Q^2 , high- x region. Understanding the neutrino cross section in the given energy range will be important both for MINOS and for the next generation neutrino oscillation experiments (T2K, Nova).

¹For the MINOS collaboration.

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