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MINER ν A: A High Precision Neutrino-Nucleus Scattering Experiment at Fermilab ROBERT BRADFORD, University of Rochester, MIN-ERVA COLLABORATION — The MINER ν A experiment is a high-precision neutrino scattering experiment designed to improve our understanding of the basic neutrino-nucleus interaction. Currently under construction, the detector will employ fine grained scintillator to achieve good vertex and timing resolution as well as full event reconstruction. Once deployed in the MINOS Near Detector Hall of the NuMI Beamline at Fermilab, the experiment will collect an estimated 14.5 M charged-current neutrino interactions on a variety of nuclear targets (H3, C, Fe, Pb) over a planned four year run. A diverse physics program includes measurements of total and differential cross sections for a number scattering topologies, studies of the axial structure of the nucleon, and studies of nuclear effects in neutrino scattering.

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