



Poster session 2 – Tuesday 5 July

P2.044 MINERvA Measurements of Partonic Nuclear Effects with Neutrinos in in the higher energy ME NuMI Beam

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Neutrino-Nucleus Deep Inelastic Scattering (DIS) events provide a probe into partonic nuclear effects along with the structure of the bound nucleon that cannot be accessed via charged lepton-nucleon interactions. The MINERvA experiment is stationed in the Neutrinos from the Main Injector (NuMI) beam line at Fermi National Accelerator Laboratory. With the recent increase in average neutrino energy and the greatly increased intensity of the NuMI beam line, projected sensitivities for nuclear structure function analyses using MINERvA's suite of nuclear targets (C, CH, Fe and Pb) will be greatly increased. Current measurements of nuclear cross section ratios using the MINERvA low energy data set will be discussed, as well as the potential for future measurements with the medium energy data set currently being collected.