

Neutrino Nucleus Deep Inelastic Scattering in MINERvA

Neutrino-Nucleus Deep Inelastic Scattering (DIS) events provide a probe into the structure of nucleons within a nucleus that cannot be accessed via charged lepton-nucleus 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 DIS cross section ratio analyses using MINERvA's suite of nuclear targets (C, CH, Fe and Pb) are greatly increased. The current state of the field and the projected reach and impacts of these measurements will be discussed.

Authorship annotation

for the MINERvA Collaboration

Session and Location

Wednesday Session, Poster Wall #118 (Auditorium Gallery Left)

Poster included in proceedings:

yes

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Track Classification: Poster (participating in poster prize competition)