

Cross section measurements with MINERvA and prospects of cross section measurements with ICARUS

Thursday, August 4, 2022 4:30 PM (20 minutes)

Accurate neutrino cross-section measurements are required for precise measurements of neutrino oscillation physics such as CP-violation and the ordering of the neutrino masses. In this talk, I will give an overview of neutrino cross section measurements with NuMI neutrino beam, specifically neutrino cross sections from MINERvA experiment and prospects of neutrino-Argon cross-section measurements at ICARUS. MINERvA is located on axis and ICARUS, located on-axis in the SBN neutrino beam, is 103 mrad off-axis from the NuMI beam. The interactions at both experiments provide the basis for important neutrino cross-section measurements and tests of models in an energy range that overlaps both the SBN oscillation search and most of the DUNE spectrum.

Attendance type

In-person presentation

Primary author: BETANCOURT, Minerba (Fermilab)

Presenter: BETANCOURT, Minerba (Fermilab)

Session Classification: WG2: Neutrino Scattering Physics

Track Classification: WG2: Neutrino Scattering Physics