

Latest results from MINERvA

MINERvA was a neutrino scattering experiment that utilized a novel, fine-grained scintillator tracker, a magnetized muon spectrometer (the MINOS near detector), and embedded Pb, Fe, CH, C, and He targets to measure neutrino interactions as a function of atomic number as well as various kinematic quantities. MINERvA collected data between November 2009 and February 2019 in the NuMI low and medium energy beam tunes with both neutrino and anti-neutrino focused beams. The collaboration is now in an intensive data analysis period that will last for at least a few more years. My talk will present the most recent MINERvA results with a focus on measurements that are important for constraining systematic uncertainties on neutrino interactions, and the neutrino flux, in current and future long-baseline oscillation experiments. I will also describe some of the analysis techniques that MINERvA pioneered as well as the effort to disseminate those techniques for future analysis of MINERvA data and the effort to integrate those techniques into DUNE.

Working group

WG2

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