Neutral pion production by charged-current antineutrino-nucleus interactions in MINERvA

TRUNG LE, Rutgers, State University of New Jersey, MINERVA COLLABORATION — MINERvA is a neutrino scattering experiment at the NuMI beamline of FNAL. It is a high resolution, fully active detector designed to study the interaction of neutrinos with nuclei. In addition to plastic scintillator, there are several other nuclear targets such as $^4$He, Fe, Pb, C, and H2O which allow detailed studies of the A dependence of neutrino cross sections. We present the preliminary results of the measurement of single neutral pion production by charged-current interactions of anti-neutrinos in plastic scintillator.