

High Energy Physics Special Seminar

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“Coherent Charged Pion Production at MINERvA”

Host: Zelimir Djurcic (HEP)

November 23, 2015 – 11:00 a.m.
Building 362 / F108

Neutrino-induced coherent charged pion production on nuclei is a rare, inelastic interaction that produces a charged lepton and pion in the forward direction while leaving the nucleus intact. Understanding this process at few GeV neutrino energy is important for precision measurements of neutrino oscillation parameters. MINERvA has measured muon neutrino and antineutrino coherent charged pion production on carbon from neutrino energies of 1.5 to 20 GeV. The measured kinematics disagree significantly with the predictions from neutrino event generators employed by current oscillation experiments.