



Contribution ID: 618

Type: Poster

Polarization effects in neutrino-nucleon interactions

Quasielastic (QE) neutrino-nucleon scattering and single pion production (SPP) are important processes in neutrino oscillation experiments. Reconstruction of the neutrino energy distribution bases on the analysis of QE scattering, while SPP is one of its main background processes. Polarization observables are well suited for studying the axial nucleon form factor and non-standard interaction. They are also sensitive to the details of the SPP models. In particular, the normal polarization observable is dominated by the interference between resonant and nonresonant contributions. We considered a polarized target, the polarization of charged lepton and recoil nucleon. In the case of QE process, multispin observables were examined. The poster bases on the results published in Phys.Rev.D 101, 073002, Phys.Rev.D 97, 013001 and Phys.Rev.D 99, 053002.

Mini-abstract

Analysis of the polarization observables in QE neutrino-nucleon scattering and SPP processes.

Experiment/Collaboration

Primary author: KOWAL, Beata (University of Wroclaw)

Presenter: KOWAL, Beata (University of Wroclaw)

Session Classification: Poster session 3