Contribution ID: **506** Type: **Poster simulations**

NuWro - neutrino Monte Carlo event generator

NuWro is a neutrino Monte Carlo generator developed at the Wrocław University and used in many studies related with oscillation and cross section experiments. The main focus is on the 1 GeV energy region but a wide spectrum of neutrino energies is covered, from ~100 MeV to TeV energies. NuWro is well known for being very effective and friendly used, but it has all the functionalities needed for a use in neutrino experiments: can be run with realistic neutrino fluxes and is equipped with detector interface.

Recent NuWro upgrades include an improved description of secondary hadron interactions within custom made intranuclear cascade model. A careful comparison with electron scattering experiments shows that NuWro reproduces the experimental data for nuclear transparency.

An attempt is made to estimate an uncertainty in evaluation of nucleon mean free path inside nucleus and its impact on understanding of recent measurements of proton knock-out cross section in neutrino experiments.

Session and Location

Monday Session, Poster Wall #152 (Hölderlin-Room)

Poster included in proceedings:

yes

Primary author: Dr SOBCZYK, Jan (Wroclaw University)

Co-authors: Dr JUSZCZAK, Cezary (Wroclaw University); Mr NIEWCZAS, Kajetan (Wroclaw University); Dr GOLAN, Tomasz (Wroclaw University)

Presenter: Dr SOBCZYK, Jan (Wroclaw University)

Track Classification: Poster (not participating in poster prize competition)