DPF-PHENO 2024

Contribution ID: **699**   Type: **not specified**

Neural Network Based Fast Optical Simulation Method in ProtoDUNE-VD

Monday 13 May 2024 17:00 (15 minutes)

I will introduce the general concepts of DUNE (Deep Underground Neutrino Experiment), as well as the current status of protoDUNE-VD, one of the two large-scale LArTPC-based DUNE Far Detector prototypes located at CERN. Later, I will focus on my neural network module, aiming at speeding up photon propagation process for optical simulation of protoDUNE-VD. This module is 50 ˜ 100 times faster than the traditional GEANT4 method, making the photon detection simulation much more efficient.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

Presenter: ZHANG, Shuaixiang (Shu) (Indiana University (US))

Session Classification: Minisymposium