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LArSoft and its applications in DUNE

Thursday 25 July 2024 09:30 (25 minutes)

In this talk we are going to provide an introduction to Fermilab computing and how to set up an account in Fermilab to use The Liquid Argon Software (LArSoft) and Its main functionalities. This tutorial will present the principal LArSoft modules used as tools in the simulation and reconstruction of different phenomena across liquid Argon time projection chambers, which are employed in neutrino experiments like DUNE. The main objective of this talk is to enable the audience to understand how a LArSoft simulation is conducted in DUNE, with special focus in the photon simulation module, while utilizing the ROOT framework for visualization results. Finally, we will present the broad context of data analysis tools used in the DUNE experiment.

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