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Electromagnetic Energy Reconstruction in ProtoDUNE

Friday, 8 July 2022 20:10 (20 minutes)

Understanding the reconstructed energy resolution of the electromagnetic (EM) activity in a liquid argon time projection chamber (LArTPC) is important for measurements of neutrino oscillations and searches for beyond standard model physics in the current and future neutrino experiments using the LArTPC technology. The high quality data taken in the ProtoDUNE single phase LArTPC are ideal for studying the energy resolution of EM objects. In this talk, we will present the excellent reconstructed energy resolutions for Michel electrons, neutral pions and beam electrons using ProtoDUNE data, covering a wide range of energies from a few MeV up to 7 GeV.

In-person participation

No

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