

Analysis and simulation of low-energy Michel electrons in ProtoDUNE

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Measurements of low-energy electrons produced by electron neutrino interactions and cosmic rays are crucial for neutrino oscillation measurements, the detection of supernova bursts and searches for beyond the standard model physics at neutrino experiments. In particular, electrons from cosmic muons that decay at rest, called Michel electrons, have well-known energy spectra below 50 MeV. They are therefore important for understanding the detector response to low-energy electrons. In this talk, we will discuss the simulation and analysis of Michel electrons in the Deep Underground Neutrino Experiment (DUNE) vertical drift prototype.

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