

Abstract Submitted
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Muon Detectors at the Near Site of Long-Baseline Neutrino Experiment DANIEL POULSON, Univ. of Colorado — The Long-Baseline Neutrino Experiment (LBNE) is designed to make precision measurement of $\nu_\mu \rightarrow \nu_e$ oscillations and increase understanding of CP violation. Critical to this experiment is detection of the initial neutrino flux at the near site facility at Fermilab. By understanding the flux, energy, and composition of the tertiary muon beam the characteristics of the initial neutrino beam can be extrapolated. There are three detectors at the near site for muon measurement: muon ionization counter, muon Cherenkov detectors, and stopped muon detectors. The muon ionization provides a basic flux profile. The muon Cherenkov detectors provide information on the energy distribution of the muon beam. The stopped muon detectors are small Cherenkov detectors that provide information about the spectrum and normalization of the muon beam. The focus of this talk will be on the design and expected performance of each of these muon detectors.

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