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Neutrino Detectors for the DUNE Experiment

Friday 31 May 2024 09:00 (30 minutes)

The Deep Underground Neutrino Experiment (DUNE) will make measurements of neutrino oscillation probabilities as a function of neutrino energy at unprecedented levels of precision. In order to do this, DUNE must figure out how to instrument office-building-sized volumes of Liquid Argon using the Time Projection Chamber technique, and at the same time make reliable predictions for how a distribution of measured neutrino energies at these far detectors can be disentangled to determine an incoming neutrino flux, using measurements from a suite of near detectors. This talk will describe both the near and far detectors of the DUNE experiment, as well as the current and near term prototyping measurements that are being made to ensure success when DUNE starts operations.

Keyword-1

Neutrino

Keyword-2

Detector

Keyword-3

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