

DUNE: Long-Baseline Oscillation Sensitivity

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The Deep Underground Neutrino Experiment (DUNE) is a next generation long baseline neutrino experiment for oscillation physics and proton decay studies. The primary physics goals of the DUNE experiment are to perform neutrino oscillation physics studies, search for proton decay, detect supernova burst neutrinos, make solar neutrino measurements and BSM searches. The liquid argon prototype detectors at CERN (ProtoDUNE) are a test-bed for DUNE's far detectors, which have operated for over 3 years, to inform the construction and operation of the first two and possibly subsequent 17-kt DUNE far detector LArTPC modules. Here we introduce the DUNE and protoDUNE experiments and physics goals as well as discussing recent progress and results.

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