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Oscillation Sensitivity in the Deep Underground Neutrino Experiment

The Deep Underground Neutrino Experiment (DUNE) is a long-baseline neutrino experiment that will be built over the next ten years with a high-power neutrino beam coming from Fermilab to a detector at the Sanford Underground Research Facility (SURF) in Lead, South Dakota. The experiment will make use of the liquid argon time-projection chamber (LArTPC) technology to image neutrino-argon interactions in a kilotonscale detector. DUNE will search for leptonic charge-parity violation, measure the neutrino mass hierarchy, and enable rare process searches such as proton decay and supernova neutrino bursts. In this poster the three flavor neutrino oscillation sensitivity will be presented along with studies of the effects of systematics affecting the sensitivity.

Authorship annotation

for the DUNE collaboration

Session and Location

Wednesday Session, Poster Wall #76 (Auditorium Gallery Right)

Poster included in proceedings:

no

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Track Classification: Poster (not participating in poster prize competition)