

Search for Muon Neutrino Disappearance in a Short-Baseline Accelerator Neutrino Beam

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Neutrino oscillation is a probe for new physics not included in the Standard Model.

We search for muon neutrino disappearance at $\Delta m^2 \sim 1 \text{ eV}^2$

using the Fermilab Booster Neutrino beamline and two experiments,

SciBooNE and MiniBooNE.

The neutrino fluxes are measured at SciBooNE and MiniBooNE detectors, located

at 100 m and 540 m downstream from the neutrino production target, respectively.

We took beam data from June 2007 through August 2008 at SciBooNE and MiniBooNE.

A preliminary result of the flux measurement at SciBooNE and SciBooNE-MiniBooNE

joint oscillation analysis will be presented.

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