

Anti-neutrinos in the NO ν A muon neutrino disappearance search

NO ν A is a long-baseline neutrino experiment using the NuMi Beam at Fermilab which aims to resolve many of the outstanding questions in neutrino physics. One of the ways that it attempts to do this is by measuring the rate of muon neutrino disappearance. Previous results have featured neutrino data in isolation; however, the current analysis will be the first to present a combination of both neutrino and anti-neutrino data.

In addition to including anti-neutrino data, the analysis technique has recently undergone significant improvements, some of which will be explored in detail. A specific focus will be given to the improvements and cross-checks which were necessary to include the anti-neutrino data. Some of the topics discussed will include comparisons of data and Monte Carlo distributions in a select set of variables, and the effect that splitting by energy resolution has on the Near/Far extrapolation.

Session and Location

Wednesday Session, Poster Wall #75 (Auditorium Gallery Right)

Poster included in proceedings:

yes

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Track Classification: Poster (participating in poster prize competition)