

Abstract Submitted  
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**Status of the NO $\nu$ A Near Detector and its role in  $\nu_\mu$  Analysis**

JOSE SEPULVEDA-QUIRO, Iowa State University / Argonne National Lab — NO $\nu$ A is a second generation long-baseline (810 km) neutrino oscillation experiment, currently taking data, designed to address the important open questions in the neutrino sector through precision measurements of  $\nu_e/\bar{\nu}_e$  appearance and  $\nu_\mu/\bar{\nu}_\mu$  disappearance. It uses an upgraded neutrino beam from Fermilab and two highly active, segmented, liquid scintillator off-axis detectors that offer a remarkable capability in event identification. One of the main purposes of the 293 ton Near Detector at Fermilab is to investigate the unoscillated beam composition by measuring the neutrino event rate, which can be used to predict the neutrino energy spectrum at the 14 kton Far Detector at Ash River, MN. In this talk, a review of the Near Detector commissioning effort and its performance focused on the  $\nu_\mu$  disappearance measurement will be discussed.

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