



Poster session 2 – Tuesday 5 July

P2.047 Progress towards a muon neutrino inclusive charged current cross section measurement using NOvA's near detector

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The 300 ton NOvA Near Detector is located underground at Fermilab, 14 mrad off the NuMI beam axis. The detector is exposed to a narrow band of neutrino energies centered at 2 GeV. The high intensity (4×10^5 interactions per day) and 97% purity of the muon-neutrino beam, along with the excellent muon identification capabilities of the NOvA detectors, allow a double-differential muon-neutrino charged-current inclusive cross section measurement useful for tuning neutrino interaction models used in simulations. This poster summarizes the event selection procedure, as well as the resolutions and limits of the final-state kinematic variables used towards a double-differential inclusive cross section measurement on a mostly-carbon target.