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Status of the ν_μ CC inclusive cross section measurement in the NOvA near detector SHIH-KAI LIN, Colorado State Univ, LEONIDAS ALIAGA, Fermilab, BISWARANJAN BEHERA, Indian Institute of Technology, KANIKA SACHDEV, Fermilab, NOVA COLLABORATION — The NOvA (NuMI Off-axis ν_e Appearance) experiment is a neutrino oscillation experiment hosted by Fermilab. The primary goal is to measure neutrino oscillation parameters by observing electron neutrino appearance and muon neutrino disappearance in the NuMI beamline. NOvA deployed two functionally identical detectors along the beamline, each of which is a segmented tracking calorimeter. A far detector 810 km away from the target in Ash River, MN, is used to observe the oscillated neutrino spectra, and a near detector underground at Fermilab is used to observe the unoscillated spectra. Cross section measurements are also carried out utilizing the high rate of neutrino interactions in the near detector. In this talk, the status of the ν_μ CC inclusive cross section measurement with 8×10^{20} proton on target (POT) of data is presented. The cross section is measured as a function of total neutrino energy and as a double differential with respect to the muon kinetic energy and cosine of the angle with respect to the neutrino beam. The purity and efficiency of the event selection, and the assessment of systematic uncertainties pertinent to this measurement are detailed.

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