Abstract Submitted for the APR18 Meeting of The American Physical Society

Neutrino charged current pionless cross section measurements at the NOvA Near Detector LEONIDAS ALIAGA SOPLIN, Fermilab — NOvA is a long-baseline two-detector experiment designed to study neutrino oscillation parameters using the NuMI beamline. The NOvA near detector, located at Fermilab, provides an excellent opportunity to measure neutrino interaction cross sections with high statistics, which will benefit current and future neutrino programs. In this talk, we present the status of the charged-current muon-neutrino measurement with zero-pions in the final state. This channel isimportant to understand the nuclear effects and discriminate between different models by having the quasi-elastic topology but also including inelastic processes where pions were absorbed before exiting the nucleus.

Leonidas Aliaga Soplin Fermilab

Date submitted: 12 Jan 2018 Electronic form version 1.4