

Abstract Submitted  
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**Empirical measurement of NC/CC ratio in neutrino-nucleon scattering with hadronic energy between 1.5 and 30 GeV** QUN WU, Univ. of South Carolina, HIGH ENERGY TEAM, NOMAD COLLABORATION — The NOMAD experiment at CERN collected more than 1.7 million neutrino induced charged current and neutral current (CC and NC) events. This large high resolution data sample allows for the first precise, empirical measurement of the ratio of the NC to CC cross sections in the hadronic energy range 1.5 to 30 GeV. This ratio measurement will have a direct application in determining background levels at current and proposed long baseline neutrino oscillation experiments, such as MINOS and NO $\nu$ A. The measured ratio will be presented, focusing on the likelihood technique used for NC/CC separation and a brief discussion of the application of this result to MINOS.

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