

Abstract Submitted  
for the APR13 Meeting of  
The American Physical Society

**Muon Energy Estimations at  $NO\nu A$**  FERNANDA PSIHAS, University of Minnesota Duluth,  $NO\nu A$  COLLABORATION — Muon energy reconstruction plays a key role in the muon neutrino disappearance analysis in the  $NO\nu A$  experiment. We now employ three different methods to estimate the energy of muons in the  $NO\nu A$  detectors: range, calorimetry and multiple scattering. Each of them takes advantage of the properties of the  $NO\nu A$  detectors and yields a different resolution for muon energy. Given the distinct approaches of these methods, events for which each of them has better resolution, respectively, have different characteristics. As a consequence, each can be applied to those events for which its resolution is higher. The three techniques are presented and compared.

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Date submitted: 11 Jan 2013

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