

Abstract Submitted  
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**Electromagnetic Content of Neutral versus Charged Current Neutrino Interactions** MATT SEATON, SANJIB MISHRA, ANDREW GODLEY, University of South Carolina, NOMAD COLLABORATION — Asymmetric high energy photon conversion, where the electron carries most of the energy, in the hadronic shower of NC events will constitute the main background to the  $\nu_e$  signal in theta-13 mixing experiments such as NO $\nu$ A. The fine resolution NOMAD data can address this issue precisely. Measurements of the ratios of photon and  $\pi^0$  to total visible energy, in hadronic  $P_T$  bins, for NC and CC will be presented along with the method for obtaining them. These can be used to calibrate current Monte Carlo to accurately predict backgrounds for NO $\nu$ A, and MINOS.

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