Electron Neutrino identification in the NOνA Detectors

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The NOνA long-baseline neutrino experiment is designed to search for oscillations of muon neutrinos to electron neutrinos. These oscillations are sensitive to the neutrino mass hierarchy and CP violation effects. NOνA will use the off-axis muon neutrino beam produced by the NuMI beam at Fermilab. It consists of a Near Detector at Fermilab and a Far Detector 810 km away at Ash River, Minnesota. The main challenge of the experiment is the identification of the $\nu_e$ charged-current events. In this talk, I will discuss the several techniques developed to separate the charged-current signal events from neutral current background events.