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A First Analysis of Radiation Length in the NOvA Near Detector HARVEY SHOWS III, Louisiana State Univ - Baton Rouge, GAVIN DAVIES, MARK MESSIER, Indiana University, NOVA COLLABORATION — The NOvA experiment is a long-baseline neutrino oscillation experiment based at Fermilab focused on answering the prevailing questions in neutrino physics today: the neutrino mass hierarchy, neutrino CP violation, and precision measurements of $|\Delta m^2_{32}|$, and θ_{23} through the observations of the appearance of electron neutrinos and the disappearance of muon neutrinos. The measurement of electron neutrino appearance depends on the detector's ability to distinguish electro-magnetic showers resulting from electrons from backgrounds resulting from photons. The scale of key features in these showers depends on the radiation length of the materials which compose the detector and the degree to which this distance is accurately modeled in simulation determines how well the selection process of electron showers is understood. I present a measurement of the photon conversion distance using photons from pi0 decays in data and simulation which is related to the radiation length by a constant factor.

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