

Abstract Submitted  
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**Neutrino-induced charged-current neutral pion (CCpi0) production in the P0D in the T2K experiment** DANIEL RUTERBORIES, Colorado State University — The T2K experiment is a second-generation long-baseline neutrino oscillation experiment designed to search for the appearance of electron neutrinos in a muon-neutrino beam. The PiZero sub-detector (P0D) of the T2K off-axis near detector ND280 is used to characterize the neutrino beam and to measure neutrino cross-sections. The T2K narrow-band beam peaks at  $\sim 600$  MeV, where experimental knowledge of these cross-sections is limited. The CCpi0 analysis can be used to better understand the neutral-current neutral pion (NCpi0) interaction, a major background for the electron-neutrino appearance measurement. I will give an overview of the CCpi0 interaction in this energy region and present the current status of the ongoing data analysis.

Daniel Ruterbories  
Colorado State University

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