Abstract Submitted
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Development of a proton/muon discrimination algorithm to investigate neutrino-nucleon elastic scattering in the PØD DANIEL RUTERBORIES, Colorado State University — The PiZero sub-detector (PØD) of the T2K off-axis near detector ND280 is used to measure neutrino interactions and beam properties. The measurement of neutrino-nucleon elastic scattering requires a robust contained-track particle identification (PID) algorithm to indentify protons while rejecting the large background of muons and pions from other neutrino interaction channels. I will give a brief description of the PØD, an overview of neutrino interactions, and then a description of the method and performance of this discrimination algorithm.

Daniel Ruterbories
Colorado State University

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