

Abstract Submitted
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Selection of the Neutrino Induced Charged Current Single Pion Events with the T2K Near Detector¹ TOMASZ WACHALA, SHAMIL ASSYLBEKOV, ROBERT WILSON, Colorado State University, T2K COLLABORATION — In order to calculate the neutrino induced charged current single pion production on water a two-track event selection in the T2K near detector has been developed. High purity muon tagging was done by requiring its minimum range in the detector and a negative charge. Pion candidate was selected by applying dE/dx based particle identification technique. Event selection has been applied to the simulated data from water-in and water-out detector running modes and preliminary values of 72% and 77% of the observable CC1 π purities were achieved. Preliminary results on the event selection optimization and performance as well as on the systematic errors related to the detector modeling are presented.

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