Abstract Submitted
for the APR13 Meeting of
The American Physical Society

Analysis Strategy and Selection Procedure for ν_μ Charged Current Inclusive Interactions using the π^0 Detector (P0D) and the Time Projection Chambers of the T2K Experiment EREZ REINHERZ-ARONIS, ALEX CLIFTON, RAJ DAS, WALTER TOKI, Colorado State University, ROBERT JOHNSON, ALYSIA MARINO, TIANLU YUAN, University of Colorado — ν_μ Charge-Current events are produced and collected by the Near Detectors (ND280) in the Tokai to Kamioka (T2K) experiment. This talk focuses on those interactions that are created in the Pi-Zero detector (PØD) and whose momentum is measured by the Time Projection Chambers (TPC). The description of the analysis event selection is presented which includes Data-Quality cuts, Beam Quality parameters, and Fiducial Volume boundaries which are applied on the beginning of the PØD track. In addition the matching procedure of a TPC track to a PØD track and the optimization of this procedure in presented.

Walter Toki
Colorado State University

Date submitted: 11 Jan 2013 Electronic form version 1.4