IOP Institute of Physics 2013 High Energy and Astro Particle Physics

Contribution ID: 112 Type: not specified

Charged-current 1pi0 analysis with the ND280 detector of the T2K experiment.

Wednesday, 10 April 2013 09:09 (12 minutes)

The cross-section uncertainty for neutrino interactions with associated pi0-meson production is an important systematic uncertainty in the measurement of electron-neutrino appearance within the Super-Kamiokande (far) detector of the T2K experiment. The pi0 analysis group of ND280 (near) detector are developing multiple parallel analyses with the aim of producing several pi0, inclusive and exclusive, cross-section measurements to help reduce this important systematic uncertainty.

The focus of this talk will be on the development of selection cuts which first select muons from charged-current interactions in the fine grain detectors of the ND280 tracking detector region. Secondly, reject charged particle backgrounds, particularly charged pions, which contaminate the desired exclusive 1pi0 final state. And finally, the selection of pi0 decay photons within the electromagnetic calorimeters which surround the tracking region of the ND280 detector.

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Session Classification: Track 2

Track Classification: Parallel Track 2