

Measurement of Resonance Interaction in The NOMAD Detector

Friday, 29 August 2014 11:50 (25 minutes)

Resonance interaction is one of the most important modes in the oscillation region of the next generation long-baseline neutrino oscillation experiments, but it is also the least well measured. This talk presents a measurement of charge current resonance interaction in NOMAD detector following techniques developed for the LBNE near-detector. The measurement uses two topologies induced by resonance-interactions: 3-track and 2-track. The cross-section of the full-resonance and its ratio to the inclusive charge current interactions will be reported. Precise measurement of resonance interaction to constrain the nuclear effect will also be discussed.

WG3: Accelerator Physics (Yes/No)

No

WG2: Neutrino Scattering Physics (Yes/No)

Yes

WG4: Muon Physics (Yes/No)

No

WG1: Neutrino Oscillation Physics (Yes/No)

No

Type of presentation

Oral presentation

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Session Classification: WG2: Neutrino Scattering Physics