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Study of \nu_{\mu}-CC Interaction in Resonance Region Using Nomad Data

Monday 26 August 2019 19:00 (2 hours)

Neutrino-nucleus interactions in the resonance (RES) region is one of the most important interaction modes for the current and future generation long-baseline neutrino oscillation experiments. It is also sensitive to nuclear effects, including fermi motion, initial state nucleon correlations, and final state interactions etc., which affect event topology and neutrino energy reconstruction, and contribute to the systematic uncertainty for oscillation measurements. We present study of the \nu_{\mu} charge current interactions in the resonance region using high-statistics, high-resolution NOMAD data. Constraints on related nuclear effects are also discussed.

Working Group

WG2 : Neutrino Scattering Physics

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