Contribution ID: **25** Type: **Talk: in-person**

Study of neutrino-nucleus scattering using the superscaling approach: The SuSAv2-DCC model.

Monday, 16 September 2024 15:21 (24 minutes)

We present the combination of the SuSAv2 and dynamical coupled-channels (DCC) models. The DCC model, an approach to study baryon resonances through electron and neutrino induced meson production reactions, has been implemented for the first time in the SuSAv2-inelastic model to analyze the resonance region. The outcomes of these approaches are firstly benchmarked against (e, e') data on 12C. The description is thus extended to the study of neutrino-nucleus inclusive cross sections on 12C and 40Ar and compared with data from the T2K, MicroBooNE, NOvA, ArgoNEUT, and MINERvA experiments, thus covering a wide kinematical range.

Working Group

WG 2: Neutrino Scattering Physics

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