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Theoretical description of quasielastic neutrino-induced strange particle production

We present calculations of the quasifree associate production via the neutrino-nucleus weak interaction. Our formalism is done in the relativistic plane wave impulse approximation. In the plane wave limit, the spectator approximation is used to construct the invariant matrix element. The cross section is constructed as the contraction between the leptonic and hadronic tensors. The numerical results are generated based on the Born-term approximation. The distributions of the differential cross section with respect to various kinematical inputs are presented.

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