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Implementation of the npnh model of Martini et al in the GENIE event generator

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We present an implementation of the npnh model of Martini et al in the GENIE neutrino nucleus interaction event generator along side subsequent comparisons of the model predictions to neutrino cross-section measurements. The Martini model includes a particularly comprehensive description of npnh interactions, considering MEC, SRC and interference contributions in addition to a contribution from 3p3h interactions. Its implementation in GENIE allows neutrino oscillation analyses to benchmark their input interaction models and motivates a more complete treatment of their systematic uncertainties.

Poster prize

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