## Nuclear transparency in Monte Carlo neutrino event generators

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The hadron cascade model is an essential part of Monte Carlo neutrino event generators that governs the final-state interactions of knocked-out nucleons and produced pions. Working in the context of NuWro, we show that such a model, enriched with physically motivated modifications of nucleon-nucleon cross sections and incorporation of nuclear correlation effects, can reproduce experimental nuclear transparency data. We estimate the uncertainty of nucleon final-state interaction effects and apply it to recent neutrino-nucleus cross section measurements that include an outgoing proton in the experimental signal. Finally, we draw conclusions on a perspective of identifying events that originate from the two-body current mechanism.

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