

## **Impact of HF-CRPA CCQE model on the latest NOvA results**

NOvA is a long-baseline neutrino experiment based at Fermilab, dedicated to measuring various neutrino oscillation parameters. Recently, the NOvA collaboration presented new results at NEUTRINO 2024. A significant enhancement in the modeling of charged-current quasielastic (CCQE) interactions has been achieved with the implementation of the Hartree-Fock (HF) mean-field model, incorporating continuum random phase approximation (CRPA) corrections. This HF-CRPA model offers substantial improvements in the low-energy region. In this presentation, I will discuss the impact of the HF-CRPA model on the latest three-flavor oscillation results of the NOvA experiment.

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