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Nucleon axial form factor from lattice QCD

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In this talk, I will review the status of lattice QCD calculations critical for analyzing neutrino interactions with nuclear targets, focusing on the nucleon axial charge and form factors. The Deep Underground Neutrino Experiment (DUNE), an upcoming neutrino oscillation experiment, will benefit significantly from precise lattice QCD calculations of these quantities. Improved preliminary results for the nucleon axial charge and form factors will be presented, along with a discussion of systematic challenges, such as removing excited-state contributions and obtaining results at the physical point.

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