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Precision predictions for future CEvNS experiments

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The coherent elastic scattering of neutrinos from nuclei can act as a
probe of not only standard model and nuclear physics but also beyond-standard model physics - including some models of dark matter. To make the most of future high-statistics experiments, we require precise predictions for the scattering cross sections. I will present results of nuclear shell model calculations that we've used to refine the Standard Model predictions for recent and near-future experimental results from the COHERENT experiment.

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