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Medium modification of nuclear currents in light nuclei from lattice QCD

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The effects of a nuclear medium on the properties of the proton and neutron are of great import to both our understanding of nuclei and to their use as targets in intensity frontier experiments. Using first-principles lattice quantum chromodynamics calculations, the NPLQCD collaboration has determined nuclear effects in the couplings of light nuclei to scalar, axial and tensor quark currents, with a key finding that the scalar coupling can be significantly altered even for nuclei as light as ^{3}He. Future calculations that fully quantify the uncertainties in this work will also be discussed.