

DNP17-2017-000531

Abstract for an Invited Paper
for the DNP17 Meeting of
the American Physical Society

Nuclear physics from Lattice QCD

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I will discuss the current state and future scope of numerical Lattice Quantum Chromodynamics (LQCD) calculations of nuclear matrix elements. The goal of the program is to provide direct QCD calculations of nuclear observables relevant to experimental programs, including double-beta decay matrix elements, nuclear corrections to axial matrix elements relevant to long-baseline neutrino experiments and nuclear sigma terms needed for theory predictions of dark matter cross-sections at underground detectors. I will discuss the progress and challenges on these fronts, and also address recent work constraining a gluonic analogue of the EMC effect, which will be measurable at a future electron-ion collider.