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Grounding nuclear physics in the strong nuclear force

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Predicting the properties of nucleons and nuclei directly from the interactions of quarks and gluons, governed by quantum chromodynamics (QCD), is a long-standing challenge for nuclear physics. At the energies relevant to nuclear physics, QCD is strongly coupled and cannot be solved analytically. The solution to this is lattice QCD, in which the strong nuclear force is formulated in a discretised finite box (the "lattice") and correlation functions are determined stochastically. I will review recent progress in understanding nucleons and light nuclei directly from lattice QCD calculations and highlight some key contributions to our theoretical understanding of nuclear physics.