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Nuclear Physics from Lattice QCD SILAS BEANE, Univ of Washington — Over the last several decades, theoretical nuclear physics has been evolving from a very-successful phenomenology of the properties of nuclei, to a first-principles derivation of the properties of the visible matter in the Universe from the known underlying theories of Quantum Chromodynamics (QCD) and Electrodynamics. These developments are being achieved using lattice QCD, a method for treating QCD numerically with large computers. After a brief motivational introduction, I will present some of the recent calculations of the properties of the simplest nuclear and hypernuclear systems using lattice QCD.

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