

Recent Results in Nuclear Lattice Effective Field Theory

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ABSTARCT

This talk reviews some recent progress made by the Nuclear Lattice Effective Field Theory Collaboration. In the first part I discuss an *ab initio* calculation of alpha-alpha scattering which uses a technique called the adiabatic projection method. In the second part I present evidence that nuclear matter is near a quantum phase transition. I discuss the control parameter for this transition and the implications for nuclear clustering and the binding of protons and neutrons within nuclei.