

Effective Field Theories for Few-Nucleon Systems

The low-energy limit of QCD is represented by a tower of effective field theories (EFTs): Chiral, Pionless, Halo/Cluster, and Roto-Vibrational, with perhaps others still to be developed. EFTs have transformed the landscape of nuclear theory by providing a systematic framework to account for multi-body forces and currents following the same tenets used in other areas of physics. However, issues of consistency remain with the most popular, Chiral EFT. I will describe recent developments in the simpler, Pionless EFT to illustrate how it provides a basis for nuclear structure and reactions that is consistent with QCD.

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