

# Chiral expansion of nuclear forces: explicit delta scenario

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Chiral effective field theory (EFT) is an ideal tool to study the interaction between nucleons. It provides a well understood connection to fundamental theory of strong interaction QCD and avoids the complexity in dealing with quarks and gluons as degrees of freedom. Effective degree of freedom in chiral EFT are pion, nucleon and delta fields. In my talk I will discuss the current status in construction of chiral nuclear forces. In particular the importance of explicit delta degrees of freedom will be discussed. Rich spin/isospin structure of high order contribution of three-nucleon forces might have a potential to resolve long standing puzzles in three- and four-nucleon sector.

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