The 8th International Workshop on Chiral Dynamics 2015



Contribution ID: 35 Type: Talk

Recent developments in neutron-proton scattering with lattice effective field theory

Thursday, 2 July 2015 14:55 (15 minutes)

In this talk I want to present the recent progresses in neutron-proton scattering on the lattice with Lattice EFT. Among them, the study of the different lattice actions in describing the scattering observables and binding energy of the deuteron. The convergence of the chiral series for these observables will be analyzed as well, and will be shown to be in good agreement with the expected behaviour of a perturbative approach. Finally, I will comment on the problem regarding the description of the mixing angle on the lattice, which is one of the remaining problems since the beginning of the lattice EFT calculations.

Primary author: ALARCON, Jose Manuel (University of Bonn)

Presenter: ALARCON, Jose Manuel (University of Bonn)

Session Classification: Parallel Session 5 - Few-Body Physics WG

Track Classification: Few-Body Physics Working Group