



Contribution ID: 112

Type: **Talk**

Effective field theory in finite volume

Thursday, 5 September 2019 17:35 (25 minutes)

We utilize a baryonic effective field theory (EFT) to analyze recent Lattice QCD (LQCD) few-body calculations. To this end we have developed a finite volume few-body code based on the Stochastic Variational Method (SVM) including 2 and 3-body interactions. This new tool enable us to study the LQCD spectra directly without the need of infinite volume extrapolation. Furthermore, it can be used to study the evolution of the few-body spectra with the volume size down to small volumes, where the asymptotic Luscher theory breaks down. In this talk we present our results, analyzing LQCD results for two, three and four-nucleon systems.

Primary author: ELIYAHU, Moti

Presenter: BARNEA, Nir

Session Classification: Parallel Session Thursday: Few-Body Techniques

Track Classification: Few-Body Methods