



Contribution ID: 84

Type: **Contributed Talk**

Wilsonian RG with a multitude of cutoffs applied to halo EFT

Thursday, 3 August 2023 15:10 (15 minutes)

Generalization of the Wilsonian renormalization group approach to few-body problems by introducing a multitude of cutoff parameters has been suggested in Ref. [1]. In the framework of an effective field theory, similarly to the Gell-Mann and Low renormalization group, this approach offers the freedom of choosing optimal renormalization scheme in multi-dimensional space of renormalization scale parameters. Advantages of the generalized scheme compared to the standard Wilsonian renormalization group approach will be considered for an effective field theory of fine tuned halo states.

[1] E.Epelbaum, J.Gegelia and U.-G. Meißner,

“Wilsonian renormalization group and the Lippmann-Schwinger equation with a multitude of cutoff parameters,”

Commun. Theor. Phys. **69**, no.3, 303 (2018)

Primary authors: EPELBAUM, Evgeny (Ruhr University Bochum); GEGELIA, Jambul (Ruhr-Universität-Bochum); Mr MINDADZE, Bidzina (Ruhr-Universität-Bochum)

Presenter: GEGELIA, Jambul (Ruhr-Universität-Bochum)

Session Classification: Thursday Parallel Session: Few-body systems and halo nuclei (Linke Aula)