

Energy-energy correlators inside jets in pp and pA collisions

Tuesday 24 June 2025 13:55 (25 minutes)

Energy-energy correlators (EEC) are event-shape observables that have gained renewed interest in the recent years, due to them being less sensitive to the non-perturbative hadronization of the final-state particles. In this talk, I will discuss the EEC in pp and pA collisions in the collinear limit where the studied particles are inside the same jet. This type of EEC allows us to probe jet formation and effects of the cold nuclear medium. I will present a framework for studying EEC in both perturbative and non-perturbative regions simultaneously and discuss the importance of nuclear effects in describing the recent LHC data [1].

[1] João Barata, Zhong-Bo Kang, Xoán Mayo López, Jani Penttala (arXiv: 2411.11782 [hep-ph])

Author: PENTTALA, Jani (UCLA)

Presenter: PENTTALA, Jani (UCLA)

Session Classification: Tuesday Session