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Energy Energy correlators in DIS

Thursday 18 July 2024 10:45 (15 minutes)

The Energy-Energy Correlator is an observable that explores the angular correlations of energy depositions in detectors at high-energy collider facilities. It has been extensively studied in the context of precision QCD. In this presentation, I will discuss our recent work on the energy-energy correlator in the context of Deep Inelastic Scattering. In the limit where the energy emissions are back-to-back, the proposed observable is sensitive to the universal transverse momentum-dependent parton distribution functions and fragmentation functions. In the collinear limit, a definition of the nuclear energy-energy correlator was introduced. We would revisit the NEEC definition, which involves weighting the EEC by Bjorken x, and conducting the study across the entire phase space region.

Alternate track

1. Heavy Ions

I read the instructions above

Yes

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Session Classification: Strong interactions and Hadron Physics

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