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EECs in heavy ions and in the Lund plane

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We study the jet EEC in heavy ions, exploring the modification to its LL structure due the presence of the medium. We present exact analytic results for the $\gamma \rightarrow q\bar{q}$ channel, showing that, at low jet energies, the medium enhancement is rather moderate. We complement our study with a MC analysis, where energy loss effects are seen to compete with the modification to the splitting function. Finally, we introduce the notion of LundEEC which takes as input Lund primary declusterings instead of particles. We discuss its logarithmic structure and argue that this IRC definition gives a better handle on non-perturbative effects.

Category

Theory

Collaboration

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