

Heavy flavour jet substructure for heavy ion collisions

Tuesday, 30 July 2024 12:00 (20 minutes)

In this talk, we will present a theoretical framework for studying heavy flavor jet substructure for dense QGP medium based on the factorised picture between vacuum-like and medium-induced radiations, based on arXiv:2312.15560 and ongoing works. We studied the z_g distribution for heavy flavor, i.e. bottom and charm quark, jets propagating through the dense QCD medium. However, unlike the previous study in the BDMPS-Z framework, which takes $\omega \ll \omega_c$ limit, and leads to a simplified and factorised formula for the spectrum, we use the full expression. In the end, the expanding medium extension and some preliminary results will be introduced briefly.

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