Sar WorS 2025 - 4th Sardinian Workshop on Spin



Contribution ID: 18 Type: not specified

Heavy quark mass effects in the energy-energy correlation in the back-to-back region

Thursday, 12 June 2025 11:15 (35 minutes)

We consider the Energy-Energy Correlation (EEC) in electron-positron annihilation into hadrons at high energies, in the back-to-back (two-jet) region. We propose a simple formalism to consistently incorporate

heavy-quark mass effects in the QCD Sudakov form factor, which governs the resummation of large infrared logarithms. We also briefly discuss the extension of our results to the transverse momentum distribution in the Drell-Yan process.

Primary author: FERRERA, Giancarlo (Milan University & INFN)

Presenter: FERRERA, Giancarlo (Milan University & INFN)

Session Classification: Collinear QCD