



Contribution ID: 17

Type: **not specified**

Joint thrust and TMD resummation in SIDIS

Friday, 13 June 2025 09:35 (35 minutes)

We present the framework for obtaining precise predictions for the transverse momentum of hadrons with respect to the thrust axis in ep collisions. This will enable a precise extraction of TMD parton distributions. To this end, we make use of the derived factorization theorems within Soft Collinear Effective Theory, and calculate and renormalize the present functions. That is, the thrust-soft, thrust-TMD soft, collinear-soft and hemisphere-TMD-thrust soft functions with the delta regulator at NLO. Finally, we present our predictions for the cross-section differential in transverse momentum and thrust for SIDIS at NNLO.

Primary author: DÍAZ FERNÁNDEZ, Daniel (Universidad Complutense de Madrid)

Co-authors: SCIMEMI, Ignazio (Universidad Complutense Madrid); GUTIERREZ GARCIA, Patricia Andrea (Universidad Complutense de Madrid)

Presenter: DÍAZ FERNÁNDEZ, Daniel (Universidad Complutense de Madrid)

Session Classification: SIDIS