Contribution ID: **35** Type: **not specified**

Transverse momentum dependent distributions in dijet and heavy hadron pair production at EIC

Wednesday 17 November 2021 16:30 (20 minutes)

We discuss the measurement of gluon transverse momentum distribution (TMD) in dijet and heavy hadron pair (HHP) production in semi-inclusive deep inelastic scattering. The factorization of these processes in impact parameter space shows the appearance of a specific new soft factor matrix element on top of angular a complex valued anomalous dimensions. We show in detail how these features can be treated consistently and we discuss a scale prescription for the evolution kernel of the dijet soft function. As a result, we obtain phenomenological predictions for unpolarized and angular modulated cross sections for the electron-ion collider (EIC) using current available information on unpolarized TMD.

Primary author: F. DEL CASTILLO, Rafael (Universidad Complutense de Madrid)

Presenter: F. DEL CASTILLO, Rafael (Universidad Complutense de Madrid)

Session Classification: ep processes