Contribution ID: 38 Type: not specified

Diffractive jets and evolution of DTMDs in coordinate and momentum space

Thursday 16 October 2025 09:10 (25 minutes)

We consider diffractive production of two or three jets in high energy photon-nucleus collisions. We show that the leading twist contribution for two hard jets is sensitive to gluon saturation and is determined by large three-parton configurations with size $R \sim 1/Q_s$, with Q_s the nuclear saturation momentum. The corresponding cross section can be written in a factorized form and in terms of diffractive TMDs. The dijet imbalance is much smaller than the hard jets momentum and consequently such TMDs follow CSS evolution. This can be done in momentum or in coordinate space and we perform a direct comparison between the two formulations.

Author: TRIANTAFYLLOPOULOS, DIONYSIS (ECT*, Trento)

Presenter: TRIANTAFYLLOPOULOS, DIONYSIS (ECT*, Trento)

Session Classification: Thursday