Diffraction and Low-x 2022



Contribution ID: 13 Type: not specified

NLO computation of diffractive di-hadron production in a saturation framework

Sunday, 25 September 2022 14:55 (20 minutes)

The cross-sections of diffractive double hadron photo- or electroproduction with large pT, on a nucleon or a nucleus, are calculated to NLO accuracy.

A hybrid formalism mixing collinear factorization and high energy kt factorization, more precisely the shockwave formalism, is used to derive the results.

The cancellation of divergences is explicitly shown, and the finite parts of the NLO differential cross-section are found. We work in arbitrary kinematics such that both photoproduction and leptoproduction are considered, making the results usable in order to detect saturation at both the future EIC or already at LHC, using UPC.

Presenter: LI, Emilie (IJCLAB)

Session Classification: Recent theoretical results on QCD and saturation

Track Classification: Recent theoretical results on QCD and saturation