XXVII International Workshop on Deep Inelastic Scattering and Related Subjects



Contribution ID: 281

Type: Parallel Session Talk

BFKL Pomeron loops in photoproduction and hadroproduction of J/psi at large transverse momenta

Tuesday 9 April 2019 17:15 (20 minutes)

We analyze contributions to diffractive photoproduction and inclusive hadroproduction of J/psi with large transverse momentum coming from cut BFKL Pomeron loops in the corresponding cross sections. In this framework the diffractive photoproduction is described by the diffractive cut of two Pomeron exchange. For the hadroproduction we consider a gluon to J/psi transition mediated by an exchange of two gluons with a partonic target. After inclusion of the small x evolution, the latter process may be described as an exchange of two cut BFKL Pomerons, and it is related to the diffractive photoproduction. We study in detail properties of the diffractive cut and of the double cut of the Pomeron loop. The obtained results are compared to experimental data on diffractive J/psi photoproduction at HERA and to the J/psi hadroproduction data from the LHC.

Authors: STASTO, Anna (Penn State); MOTYKA, Leszek; SADZIKOWSKI, Mariusz (Jagiellonian Univer-

sity); KOTKO, Piotr

Presenter: MOTYKA, Leszek

Session Classification: WG2: Small-x and Diffraction

Track Classification: WG2: Low-x and Diffraction