DIS2023: XXX International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 99 Type: Parallel talk

Small-x evolution of the gluon GPD E

Tuesday, 28 March 2023 09:20 (20 minutes)

We study the small-x evolution equation for the gluon generalized parton distribution (GPD) Eg of the nucleon. It is shown that Eg at vanishing skewness exhibits the Regge behavior identical to the BFKL Pomeron, despite its association with nucleon helicity-flip processes. We also consider the effect of gluon saturation and demonstrate that Eg gets saturated in the same way as its helicity-nonflip counterpart Hg. Our result has a direct impact on the modeling of Eg as well as the small-x contribution to nucleon spin sum rules.

Submitted on behalf of a Collaboration?

No

Participate in poster competition?

No

Primary authors: ZHOU, Jian (Shandong university); HATTA, Yoshitaka (BNL)

Presenter: HATTA, Yoshitaka (BNL)

Session Classification: WG5

Track Classification: WG5: Spin and 3D Structure