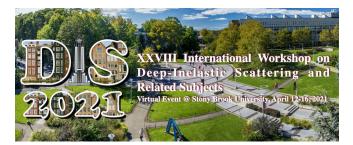
XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 600

Type: Contributed Talk

Gluon TMDs and J/ ψ polarization at the EIC

Thursday, 15 April 2021 12:58 (18 minutes)

We study the polarization of J/ψ mesons produced in semi-inclusive, deep-inelastic electron-proton scattering in different reference frames at the EIC energies. At low transverse momentum, we propose factorized expressions in terms of transverse momentum dependent gluon distributions and shape functions. In particular, we show that the distribution of linearly polarized gluons can, in principle, affect the polarization of the produced quarkonium states. We also demonstrate that our formulae, at the order α_s , correctly match with the collinear factorization results at high transverse momentum.

Primary authors: PISANO, Cristian; D'ALESIO, Umberto (INFN and University of Cagliari); Mr MAXIA, Luca (University and INFN Cagliari); MURGIA, Francesco (INFN Cagliari); Dr RAJESH, Sangem (INFN Cagliari & University of Cagliari, Italy)

Presenter: PISANO, Cristian

Session Classification: Future Experiments

Track Classification: Future Experiments