

Overview on gluon TMDs

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Abstract

In this talk I will present an overview of recent developments on gluon transverse momentum dependent (TMD) parton distributions. Such non-perturbative objects might be feasible in high-energy proton collisions at the LHC, but also at a future Electron-Ion Collider (EIC). Most interestingly, due to the gluon's transverse momentum the gluon can have a linear polarization which is encoded in a particular TMD parton distribution. Since the linear gluon distribution generates new observables like non-isotropic azimuthal dependences of the proton-proton cross section this function may be considered as a useful tool in particle physics.