Deep Inelastic Scattering 2025



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T-odd and T-even hadronic structures of the Drell-Yan process. Small Q_T/Q expansion

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We present detailed analysis of the T-even and T-odd lepton angular distribution in the Drell-Yan process including $\gamma/Z^{\circ}0$ gauge boson exchange and using perturbative QCD based on the collinear factorization scheme at leading order in the α_s expansion and $\alpha_s^{\circ}2$ for T-odd . We focus on the study of the transverse momentum Q_T dependence of the corresponding hadronic structure functions and angular coefficients up to next-to-next-to-leading order in the Q_T^2/Q^2 expansion. We analyze Q_T dependence numerically and compare T-even angular coefficients with available data of the ATLAS Collaboration at LHC.

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