

XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



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N3LO extraction of the Sivers function from SIDIS, Drell-Yan, and W/Z data

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We perform the global analysis of polarized Semi-Inclusive Deep Inelastic Scattering (SIDIS), pion-induced polarized Drell-Yan (DY), and W/Z boson production data and extract the Sivers function for u, d, s and for sea-quarks. We use the framework of transverse momentum dependent factorization at N3LO accuracy. The Qiu-Sterman function is determined in a model-independent way from the extracted Sivers function. We also evaluate the significance of the predicted sign change of Sivers function in DY with respect to SIDIS

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