

Abstract Submitted
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Transverse single spin asymmetries in hadronic gauge boson production¹ ANDREAS METZ, JIAN ZHOU, Temple University, Philadelphia — Measuring the sign of the Sivers asymmetry in the Drell-Yan process is one of the most important projects for high-energy spin physics. Such a measurement not only would critically test our current understanding of transverse single spin asymmetries in the framework of QCD, but has also far-reaching consequences beyond spin physics. Based on new studies we argue that the same underlying dynamics can be tested in the production of W-bosons in proton-proton collisions. Numerical studies for kinematics at the RHIC will be shown. Moreover, we present results for another spin correlation in the Drell-Yan process which is also complementary to the Sivers effect, but does not rely on the factorization in terms of transverse momentum dependent correlators.

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