

Single spin asymmetries in inclusive DIS and in hadronic collisions

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Summary

Transverse single spin asymmetries (SSAs) in inclusive DIS can be generated through two-photon exchange. We mostly focus on the case where two photons couple to different quarks. Such a contribution involves a quark-photon-quark correlator in the nucleon, which has a relation to the ETQS quark-gluon-quark correlator T_F , where T_F plays a key role in the description of transverse SSAs in hadronic collisions. Using different parameterizations for T_F we compute the transverse target SSA in DIS for both a proton and a neutron target and compare the results to recent data. In particular, we also discuss the implications on our understanding of SSAs in hadronic collisions.

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