

QED Corrections to Azimuthal Asymmetries of SIDIS Cross sections

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We analyze an impact of QED corrections on observables of semi-inclusive deep-inelastic scattering (SIDIS) of electrons and muons on a proton target. It is shown that both the radiative effects and two-photon exchange generate new azimuthal dependent-terms and corresponding $\langle \cos(\phi) \rangle$ moments. A quark-diquark model of a nucleon was used in the calculations of two-photon effects which appear to be essential for both the magnitude and transverse-momentum dependence of $\langle \cos(\phi) \rangle$ and $\langle \cos(2\phi) \rangle$ moments.

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