DIS 2015 - XXIII. International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 103

Type: not specified

Extraction of the distribution function h_{1T}^{\perp} from experimental data

We attempt an extraction of the pretzelosity distribution (h_{1T}^{\perp}) from preliminary COMPASS, HERMES, and JLAB experimental data on $\sin(3\phi_h - \phi_S)$ asymmetry on proton, and effective deuteron and neutron targets. The resulting distributions, albeit with big errors, for the first time show tendency for up-quark pretzelosity to be positive and down-quark pretzelosity to be negative. A model relation of pretzelosity distribution and orbital angular momentum of quarks is used to estimate contributions of up and down quarks.

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Track Classification: WG6 Spin Physics