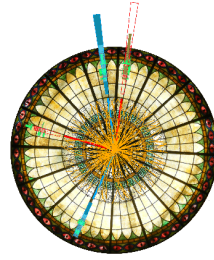


DIS 2015

XXIII International Workshop on
Deep-Inelastic Scattering and
Related Subjects

Dallas, Texas
April 27 – May 1, 2015



Contribution ID: 102

Type: not specified

Nucleon Tensor Charge from Collins Azimuthal Asymmetry Measurements

We investigate the nucleon tensor charge from current experiments by a combined analysis of the Collins asymmetries in two hadron production in e^+e^- annihilations and single inclusive hadron production in deep inelastic scattering processes. The transverse momentum dependent evolution is taken into account, for the first time, in the global fit of the Collins fragmentation functions and the quark transversity distributions at the approximate next-to-leading logarithmic order. We obtain the nucleon tensor charge contribution from up and down quarks as: $\delta u = +0.30^{+0.12}_{-0.11}$ and $\delta d = -0.20^{+0.35}_{-0.13}$ at 90% of confidence level for momentum fraction $0.0065 \leq x_B \leq 0.35$ and $Q^2 = 10 \text{ GeV}^2$.

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Track Classification: WG6 Spin Physics