

First extraction of transversity from data on lepton-hadron scattering and hadronic collisions

Tuesday, 11 September 2018 14:30 (25 minutes)

We present the first extraction of the transversity distribution based on the global analysis of pion-pair production in deep-inelastic scattering and in proton-proton collisions with one transversely polarized proton. The extraction relies on the knowledge of di-hadron fragmentation functions, which are taken from the analysis of electron-positron annihilation data. We compute the tensor charge and we compare with the results from other extractions and recent lattice calculations. We investigate the impact of additional theoretical constraints on the low- x behavior of transversity, and of more precise COMPASS pseudodata on deuteron target.

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Session Classification: 3D Structure of the Nucleon: TMDs

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