

Neural-network extraction of collinear transversity distributions and tensor charges with distribution level lattice-QCD input

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We present a neural-network global analysis of transversity parton distributions and dihadron fragmentation functions using Belle, HERMES, COMPASS, and STAR measurements. The main new ingredient is an x -dependent lattice-QCD determination of isovector transversity, included directly at positive and negative x . It complements the limited experimental coverage and favors a larger positive up-quark and a more negative down-quark transversity while retaining an acceptable description of the world data.

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