

Perspective on proton polarised parton distribution functions

Supposing there exists an effective charge which defines an evolution scheme for both unpolarised and polarised parton distribution functions (DFs) that is all-orders exact and using Ansätze for hadron-scale proton polarised valence quark DFs, constrained by flavour-separated axial charges and insights from perturbative quantum chromodynamics, predictions are delivered for all proton polarised DFs. The pointwise behaviour of the predicted DFs and, consequently, their moments, compare favourably with results inferred from data.

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