

Lattice QCD towards TMDPDF: Boer-Mulders function

Transverse-momentum-dependent parton distribution functions (TMDPDFs) are important in revealing the 3D structure of hadrons. Among these distributions, the T-odd Boer-Mulders TMDPDF describes the transversely polarized quark distribution in an unpolarized hadron. Within large-momentum effective theory, I show a lattice calculation of both nucleon and pion Boer-Mulders functions. The calculation was done on the CLS collaboration with Clover fermion and HYP-smeared gauge links, with RG resummation applied to improve the perturbative matchings.

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