

Quasi-PDFs from Twisted mass fermions at the physical point

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Parton distribution functions (PDFs) provide a detailed description of hadron structure and are crucial inputs in analyses of collider data.

PDFs have a non-perturbative nature and Lattice QCD provides an appropriate framework of their extraction. We present results on the iso-vector quasi-quark distribution functions using an ensemble of $N_f = 2$ degenerate light quarks

in the twisted mass formulation, with pion mass 130MeV, lattice spacing $a=0.093$ fm and lattice size $48^3 \times 96$.

We discuss the non-perturbative renormalization procedure and the matching to light-cone PDFs.

An overlap between lattice and phenomenological data is found for a range of Bjorken- x values.

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