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Higher moments of the pion parton distribution functions using gradient flow

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We implement a recent proposal using gradient flow to compute higher moments of hadron parton distribution functions, circumventing the power divergent mixing problem. We discuss how to efficiently implement this computationally, as well as data analysis approaches. We present preliminary results on the first few moments of the unpolarized flavor non-singlet PDF of the pion in the MSbar scheme, using ensembles at the SU(3) flavor symmetric point, generated with stabilized Wilson fermions by the OpenLat Initiative.

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