

XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



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Pion valence structure and form-factors from lattice QCD at physical point

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We present a lattice determination of pion valence parton distribution function (PDF) and electromagnetic form-factors. Our study use NNLO leading-twist perturbative matching formula to extract first few moments and reconstruct the x -dependent PDF of pion. Three mixed action ensembles including a physical pion mass with fine lattice spacings of $a = 0.04, 0.06$ and 0.076 fm are used to investigate the mass dependence as well as approaching continuum limit.

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