

Gluon Parton Distribution of the Pion and Nucleon from Lattice QCD

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We present the x -dependent nucleon and pion gluon distribution from lattice QCD using the pseudo-PDF approach, on lattice ensembles with $2 + 1 + 1$ flavors of highly improved staggered quarks (HISQ), generated by MILC Collaboration. We use clover fermions for the valence action and momentum smearing to achieve pion boost momentum up to 2.56 GeV on three lattice spacings $a \approx 0.9, 0.12$ and 0.15 fm and three pion masses $M_\pi \approx 220, 310$ and 690 MeV .

We compare our pion and preliminary nucleon gluon results with the determination by global fits.

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