

Gluon distributions of the nucleon from lattice QCD

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We present lattice QCD calculation of unpolarized and polarized gluon Ioffe-time distributions using the pseudo-PDFs approach. We construct the nucleon interpolation fields using the distillation technique and smear the gauge fields using gradient flow. We calculate flow time-independent reduced Ioffe-time pseudo-distribution and from that, determine the unpolarized gluon PDF in the $\overline{\text{MS}}$ scheme at $\mu = 2$ GeV. We also present progress towards determining gluon helicity distribution from lattice QCD calculation.

Author: SUFIAN, Raza

Presenter: SUFIAN, Raza

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