

Abstract Submitted
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Calculation of Gluon PDF using Pseudo-PDF Technique TANJIB KHAN, William Mary, HADSTRUC COLLABORATION — We present our calculation of the unpolarized gluon parton distribution function (PDF) in the nucleon using Pseudo-PDF technique on a $32^3 \times 64$ isotropic lattice with a pion mass of 358 MeV. The nucleon interpolating fields are constructed using the distillation method while the sGEVP method is used to calculate the gluonic matrix elements. We implement the gradient-flow technique to compute the flowed matrix elements and using the double ratio, calculate the flowed reduced Ioffe-time distribution (rITD). We extrapolate the results to the flow-time independent rITD and calculate the light-cone ITD in \overline{MS} scheme, at the small z-separation limit, using NLO matching formula. Finally, the gluon PDF is calculated from the light-cone ITD by applying appropriate kernel form.

Tanjib Khan
William
Mary

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