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**Gluon PDF Calculation from Lattice QCD Using Pseudo-PDF Technique** TANJIB KHAN, KONSTANTINOS ORGINOS, College of William Mary, DAVID RICHARDS, Thomas Jefferson National Accelerator Facility — In this talk, I report on our calculation of the unpolarized gluon parton distribution function (PDF) in the nucleon using Pseudo-PDF technique. The computation is done on a  $32^3 \times 64$  isotropic lattice with a pion mass of 380 MeV and lattice spacing,  $a = 0.098$  fm using 2+1 flavor of Clover-Wilson fermion. This is the first application of the distillation method for constructing the nucleon interpolating fields for gluonic matrix elements. The bare matrix elements are calculated using the summation method. In order to reduce the statistical fluctuations, the gluonic operators are smeared using gradient flow. The systematic effects introduced by this smearing are studied as a function of the flow-time and the renormalized matrix elements are extracted by taking the small flow-time limit. Finally the lattice matrix elements are factorized to the  $\overline{MS}$  scheme PDF, at the small z-separation limit, using NLO matching formula.

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