Lattice QCD studies of pseudo-PDFs

Tuesday, 13 March 2018 15:00 (30 minutes)

Ioffe-time distributions, which are functions of the Ioffe-time ν, are the Fourier transforms of parton distribution functions with respect to the momentum fraction variable x. These distributions can be obtained from appropriate equal time, quark bilinear hadronic matrix elements which can be calculated from first principles via lattice QCD methods. Here, we present the first numerical results of the Ioffe-time distributions of the nucleon.

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Session Classification: QCD theory/phenomenology