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Particle Theory Seminar of IJCLAB
Orsay

Jeudi 22 Novembre 2018, 16 :00
LPT, 114
Domaines : hep-th

Titre : *Parton-pseudo distribution functions from Lattice QCD*

Orateur : **Savvas Zafeiropoulos (Heidelberg U.)**

Résumé : *The light-cone definition of Parton Distribution Functions (PDFs) does not allow for a direct ab initio determination employing methods of Lattice QCD simulations that naturally take place in Euclidean spacetime. In this presentation we focus on pseudo-PDFs where the starting point is the equal time hadronic matrix element with the quark and anti-quark fields separated by a finite distance. We focus on Ioffe-time distributions, which are functions of the Ioffe-time* ν*, and can be understood as the Fourier transforms of parton distribution functions with respect to the momentum fraction variable* x*. We present lattice results for the case of the nucleon and we also perform a comparison with the pertinent phenomenological determinations.*