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Light-cone PDFs from lattice QCD

Monday, 23 July 2018 14:00 (20 minutes)

Using the approach proposed a few years ago by X. Ji, it has become feasible to extract parton distribution functions (PDFs) from lattice QCD, a task thought to be practically impossible before Ji's proposal. In this talk, we discuss the recent progress in this approach concerning renormalization and matching and we set the stage for the following talk where results by the ETM Collaboration are presented at the physical pion mass. We also discuss the role of excited states in these computations and other systematic effects that need to be controlled to ultimately have precise determinations of PDFs.

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