The 29th International Nuclear Physics Conference (INPC 2025)





Contribution ID: 716

Type: Plenary Talk (Invitation Only)

QCD Link to the Light-Front Quark Model

Wednesday, 28 May 2025 12:30 (30 minutes)

I will present a mass gap solution of the 1+1D QCD in the large Nc limit known as the 'tHooft model to discuss a link between QCD and the Light-Front Quark Model (LFQM). I will highlight the interpolation between the instant form dynamics and the light-front dynamics and discuss its utility in the computation of the parton distribution function (PDF). I will then illustrate the Bakamjian-Thomas construction of the LFQM exemplifying the recent resolution of the light-front zero-mode issue raised about a decade ago regarding the pion transverse momentum distributions (TMDs) beyond the leading twist.

Consent

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