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TMD PDFs in the Laguerre polynomial basis

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We suggest a novel way of matching the non-perturbative part of TMD with the perturbative part aimed to increase the amount of perturbative
information in the TMD PDF expression. For that we perform the OPE for the TMD PDF operator in the Laguerre polynomial basis. The choice of
basis is dictated by the phenomenological observation that TMDs in the region of middle-b_T has Gaussian behavior. The obtained perturbative
expression for the TMD PDF is valid in the wide region of b_T (we estimate this region as $b_T < 2 - 3$ GeV^{-1} depending on x).

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