One-Loop Evolution of Twist-2 Generalised Parton Distributions

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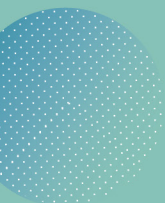
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Abstract

We revisit the evolution of generalised parton distributions (GPDs) at the leading order in the strong coupling constant αs for all of the twist-2 quark and gluon operators. We rederive the relevant one-loop evolution kernels, expressing them in a form suitable for implementation, and check analytically that some basic properties, such as DGLAP/ERBL limits and polynomiality conservation, are fulfilled. We also present a number of numerical results obtained with a public implementation of the evolution in the library APFEL++ and available within the PARTONS framework.

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