Solution of DGLAP evolution equation for gluon fragmentation in LO and NLO

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Abstract
In this work, we calculate DGLAP evolution equation at LO and NLO by Laplace method for fragmentation function of gluon to meson or baryon. To prove the validity of this method, we evolve the fragmentation functions of \( g \to \eta_c \) and \( g \to j / \eta \) by using this method. In this method, it is not necessary to calculate these functions in Laplace space. This method is just used for simplifying the equations.

Keywords: fragmentation, evolution, Lap

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