Can $\overline{\text{MS}}$ PDF be negative?

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PDF @ NLO: factorization scheme

Introduction

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Catani-Seymour formula for factorization @ NLo

An intrinsic positive scheme

Introduction

DIS scheme and similar.

Defined on physical observables.

Coefficient functions NLO behaviour

Universality of collinear structure

We can play this game because we know in advance that the relevant structure (the one related to the collinear subtraction) is universal.

Scheme change matrix

How we switch scheme and K properties

A bunch of nontrivial positivity schemes

POS, MPOS, DPOS

Is $\overline{\text{MS}}$ negative?

N-space positivity $\neq$ x-space positivity

The easy way in *N-space* and Why we need an argument in *x-space*

Introduction

Argument from MPOS -> MSbar

Thanks for your attention