



Can MS PDF be negative?

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Parton model

Light Intro: Description of the parton model

PDF @ NLO: factorization scheme

A step further: NLO -> collinear divergences -> coefficient functions ambiguity (collinear subtraction) -> factorization scheme (as PDF definition)

Catani-Seymour formula for factorization @ NLo

An intrinsic positive scheme

DIS scheme and similar.

Defined on physical observables.



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.

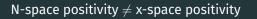
Scheme change matrix

How we switch scheme and K properties

A bunch of nontrivial positivity schemes

POS, MPOS, DPOS

Is MS negative?



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

Argument from MPOS -> MSbar

