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QCD splitting functions at four loops

Tuesday, 10 September 2024 09:30 (30 minutes)

We present computations of the even-N moments of the flavour-singlet four-loop splitting functions to N=20. These results, obtained using off-shell operator matrix elements (OMEs). We construct approximations based on our moments for the OMEs and endpoint constraints. These approximations facilitate an approximate N3LO evolution of parton distributions which are sufficiently accurate for parton momentum fractions accessible at current colliders.

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