## **Deep Inelastic Scattering 2025**



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## Hybrid high-energy factorization and evolution at NLO

I present a scheme of NLO computations for generic observables in high-energy collisions within the framework of hybrid high-energy factorization, that is with one off-shell initial-state parton. The scheme is obtained by taking a high-energy limit of the NLO computation in collinear factorization. Terms belonging to the projectile and the target are identified, and the ambiguity of this separation is governed by the Collins-Soper scale muY. The unintegrated PDF is constructed at NLO in terms of the usual PDFs, and its evolution with respect to the scale muY reproduces the Collins-Soper-Sterman equation in the TMD limit (|kT|« muY). The BFKL-Collins-Ellis evolution of the Green's function in the unintegrated PDF takes care of the resummation of high-energy logarithms.

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