Quantum chromodynamics: string theory meets collider physics



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## Central jet production vertex in NLO kt-factorization

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We discuss the inclusive production of jets in central regions of rapidity in the context of  $k_T$ -factorization at next-to-leading order (NLO). Calculations are performed in the Regge limit making use of the NLO BFKL results. We introduce a jet cone definition and carry out a proper phase-space separation into multi-Regge and quasi-multi-Regge kinematic regions. We discuss two situations: scattering of highly virtual photons, which requires a symmetric energy scale to separate impact factors from the gluon Green's function, and hadron-hadron collisions, where a non-symmetric scale choice is needed.

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