

# A Long Journey to a full NLO calculation in CGC formalism

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Color Glass Condensate (CGC) formalism is an effective formalism in QCD, and it allows us to compute multiple scattering and evolution in dense gluon systems. Full NLO order calculations are usually very challenging in CGC, yet they also reveal rich QCD dynamics. The simplest case, which is the single hadron production in  $pA$  collisions, involves DGLAP and BK evolutions as well as the threshold resummation. Besides, the numerical calculation of the NLO corrections requires a tremendous amount of work and many fun and creative tricks. After a long journey in this NLO calculation, we finally may be able to reach a reliable and complete NLO calculation in CGC soon.

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