

# Heavy quark pair production in pA collisions at the LHC within the CGC framework

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We consider heavy quark pair production in high energy pp and pA collisions from the Color Glass Condensate (CGC) framework. The parton saturation is expected to characterize low- $P_{\perp}$  spectrum of the heavy quark pair production. Meanwhile, initial soft gluon radiation also can affect the low- $P_{\perp}$  spectrum.

Therefore, in order to study the parton saturation quantitatively, both the small- $x$  resummation and the low- $P_{\perp}$  resummation have to be considered simultaneously.

In this talk, a brief review of the CGC framework will be presented first and then we will investigate the low- $P_{\perp}$  spectrum by considering initial soft gluon emission.

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