

Single inclusive forward hadron production at next-to-leading order

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We discuss single inclusive hadron production from a high energy quark scattering off a strong target color field in the Color Glass Condensate formalism. Recent calculations of this process at the next-to-leading order accuracy have led to negative cross sections at large transverse momenta. We identify the origin of this problem in an oversubtraction of the rapidity divergence into the Balitsky-Kovchegov evolution equation for the target. We propose a new way to implement the kinematical restriction on the emitted gluons to overcome this difficulty.

Collaboration

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