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Rapidity evolution of Wilson lines at the next-to-leading order: Balitsky-JIMWLK equation at NLO

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Scattering amplitudes of proton-Nucleus or Nucleus-Nucleus collisions at high-energy are described by matrix elements of Wilson line operators - infinite gauge factors ordered along the straight lines of the fast moving particles. The energy dependence of such amplitudes is described by the evolution equation of Wilson lines with respect to the rapidity parameter - the Balitsky-JIMWLK evolution equation. Most of the current phenomenology of high-energy and high-density QCD is based on the leading-order evolution equation with only running coupling corrections. In my talk I will present the derivation of the Balitsky-JIMWLK evolution equation at the next-to-leading order.

On behalf of collaboration:

None

Author: CHIRILLI, Giovanni Antonio (The Ohio State University)

Presenter: CHIRILLI, Giovanni Antonio (The Ohio State University)

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