Int. Conference on the Initial Stages of High-Energy Nuclear Collisions



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Solution of the NLO BFKL Eq. and analytic NLO γ^* - γ^* -cross section from High-Energy OPE in Wilson-lines

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I will present the solution of the next-to-leading order (NLO) BFKL equation obtained by constructing its eigenfunctions perturbatively, using an expansion around the LO BFKL (conformal) eigenfunctions. This method can be used to construct the solution of the BFKL equation with the kernel calculated to an arbitrary order in the coupling constant. Then, using the solution of the NLO BFKL equation and the NLO pomeron impact factor recently calculated by using the high-energy Operator Product Expansion (OPE) in Wilson lines, I will construct the analytic NLO cross section of γ^* - γ^* -scattering process at high-energy.

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