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Numerical solutions of the JIMWLK equation with the kinematical constraint

Friday 8 April 2022 14:16 (4 minutes)

In this talk, I will describe the implementation of the kinematical constraint within the Langevin formulation of the JIMWLK equation following the proposal of Hatta and Iancu. I will discuss the numerical stability and continuum and infinite volume extrapolations. I will compare the solutions with and without the collinear improvement. I will also comment on the rapidity evolution rate of the saturation radius and its modification due to the kinematical constraint. Some of the discussed results were published in arxiv:2111.07427[hep-ph]. Calculations were performed using the software published in SoftwareX 16 (2021) 100887.

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