

gluon transport in BAMPS and possible BEC phenomenon

We study the equilibration for gluons far from thermal equilibrium in relativistic kinetic theory with Color Glass Condensate (CGC) inspired initial distribution. Using a partonic cascade approach BAMPS with newly developed stochastic scheme for implementing the quantum statistics, we now simulate here a static gluonic matter with elastic collisions. We show that under such a elastic interaction driven case the possibility for gluons to condensate under over-populated initial condition, the kinetic evolution for gluon BEC growing would be demonstrated. We also will discuss about the turbulent scaling solution for over-populated case, both particle cascade and energy cascade would be analysed.

Preferred Track

Initial State Physics and Approach to Equilibrium

Collaboration

Other

Author: Dr ZHOU, Kai (FIAS, Goethe-University Frankfurt am Main)

Presenter: Dr ZHOU, Kai (FIAS, Goethe-University Frankfurt am Main)

Session Classification: Poster Session