Contribution ID: **1138** Type: **Parallel session talk**

Quark production and thermalization of the longitudinally boost-invariant quark-gluon plasma

Friday 19 July 2024 09:21 (17 minutes)

We use the Boltzmann Equation in Diffusion Approximation (BEDA) as a tool to explore the time evolution of an initially out-of-equilibrium and highly occupied expanding system of gluons. We study the hydrodynamization of this system as well as the quark production until chemical equilibration is established. A comprehensive study of such processes will be presented based on parametrical estimations in the weak-coupling limit, similar to those employed for bottom-up thermalization in pure gluon systems, as well as complementary numerical solutions of the BEDA, provide a better understanding of the underlying processes involved in the different stages of the evolution.

Alternate track

I read the instructions above

Yes

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Session Classification: Heavy Ions

Track Classification: 07. Heavy Ions