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Typ: Talk

Early time dynamics of QCD with conserved charges in heavy-ion collisions

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In the early stages of heavy-ion collisions, at the highest energies, the system begins in a highly anisotropic state which is far from equilibrium. At later times, the dynamic evolution of the system is well described in the framework of relativistic hydrodynamics which requires local thermodynamic equilibrium. The KoMPoST framework has had some success in bridging the gap between these descriptions via a coarse-grained, non-equilibrium evolution of the system assuming a medium dominated completely by gluons. In this work, we present new results in this framework which include quark degrees of freedom in the response of the system to perturbations from the non-equilibrium background.

Experiment/Theory

Theory/Phenomenology

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Sitzung Einordnung: Parallel: Early-Time Dynamics & nPDFs

Track Klassifizierung: Early time dynamics and nuclear PDFs