

Semiholography for heavy ion collisions: recent developments

Tuesday, 26 June 2018 17:30 (30)

We discuss recent developments in the semiholographic model for heavy ion collisions (HICs) proposed by Iancu and Mukhopadhyay and further developed by Mukhopadhyay, FP, Rebhan, and Stricker. In this approach a GLASMA description of the early stages of HICs, i.e. a classical Yang-Mills field theory is coupled to a holographic model which plays the role of a bath of strongly coupled gluons. We will show the first results of such a setup in the fully dynamical non-equilibrium regime in particular how the classical Yang-Mills sector loses energy to the strongly coupled sector. Finally we discuss in more generality, how to consistently couple holographic descriptions of non-perturbative physics to classical and perturbative quantum field theories.

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Session Classification : Parallell