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J/ψ suppression in the of presence of dissipative forces in a sQGP

Content :

We have considerd first-order dissipative corrections to the plasma equation of motion in the Bjorken boost-invariant expansion with a strongly-coupled QGP equation of state which is quite close to the lattice equation of state. We study the survival of $c\bar{c}$ states in a strongly coupled quark-gluon plasma. We consider the dissipative corrections which are coming from the shear viscosity, η only. We further explore the sensitivity of prompt and sequential suppression of these states to the shear viscosity to entropy density ratio,η/s. We consider perturbative QCD as well as AdS/CFT predictions for η/s. Our results show excellent agreement with the recent experimental results at RHIC.

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