

Non-conformal holography of light and heavy quark jet quenching at RHIC and LHC

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We investigate the connection between the conformal anomaly in the confinement transition region and quenching of heavy and light quarks in heavy ion collisions at RHIC and LHC by using a new non-conformal holographic model with a dilaton field. Holographic thermodynamic properties of the sQGP are constrained by lattice QCD calculations. The string drag force model of jets is generalized to include both trailing and falling string scenarios. We compare the differential nuclear modification of light and heavy quark jets predicted by this model emphasizing the novel quark mass and energy dependence through the confinement transition region.

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