

Shooting string holography of jet quenching at RHIC and LHC

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Previous holographic models of jet quenching in AdS/CFT via “falling strings” were found to be incompatible with the recent LHC data in arXiv:1208.0305. A new set of “shooting string” holographic jet initial configurations with finite momentum at string endpoints was proposed in arXiv:1306.6648 that suggests a more natural scheme for determining the instantaneous rate of energy loss of jets in SYM plasmas with longer stopping distances. We apply this framework to predict nuclear modification factors RAA of jets, and compare to recent data at RHIC and LHC. Phenomenological consequences of non-conformal deformations of AdS geometry and Gauss-Bonnet quadratic curvature corrections will be discussed.

Keywords

Jet quenching, AdS/CFT correspondence, RAA, light quark energy loss

Primary authors: FICNAR, Andrej (Columbia University); Prof. GYULASSY, Miklos (Columbia University); Prof. GUBSER, Steven (Princeton University)

Presenter: FICNAR, Andrej (Columbia University)

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