

Jet quenching effect in heavy ion collision based on AdS/CFT energy loss model

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We employ the AdS/CFT correspondence to study the jet quenching effect in Quark-gluon plasma in heavy-ion collisions. The nuclear modification factor R_{AA} and elliptic flow parameter v_2 are studied in different centrality collisions at RHIC and LHC. Our numerical results agree with data. Magnetic field and chemical potential of the medium are also considered for the observable evaluations. It is found that magnetic field and chemical potential both enhance the jet energy loss.

Theory / experiment

Theory

Group or collaboration name

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