

# Rho and Eta production in heavy ion collisions

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The large transverse momentum spectra of vector mesons such as Rho and Eta in Au+Au at 200 GeV and Pb+Pb collisions at 2.76 TeV are calculated within the NLO perturbative QCD improved parton model. We employed the broken SU(3) model to determine the quark and gluon fragmentation functions of octet vector mesons in a simple way with an SU(3) breaking parameter. And we are using the higher-twist approach to modify these fragmentation functions to incorporate the jet quenching effect when propagating through the hot and dense medium. The jet transport parameter that controls medium modification is proportional to the initial parton density and the coefficient is fixed by the RHIC data on suppression of large  $p_T$  hadron spectra.

## Keywords

jet, large transverse momentum, vector meson production

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