

“jet quenching at finite chemical potentials and near the CEP ”

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Jet quenching parameter \hat{q} is an essential parameter that characterizes the interaction strength between jet partons and the QGP. Based on the quark-meson model, we conduct a first calculation on \hat{q} at finite chemical potential up to the one-loop order, and find that the momentum broadening of jets is enhanced not only at high temperature, but also at high chemical potential. We further investigate the behavior of \hat{q} near the critical end point (CEP) of the QCD phase diagram by coupling our calculation with a recently developed equation of state that includes a CEP in the universality class of the Ising model.

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