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## Exploring jet transport coefficients by elastic scattering in the strongly interacting quark-gluon plasma

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We study the interaction of leading jet partons in a strongly interacting quark-gluon plasma (sQGP) medium based on the effective dynamical quasi-particle model (DQPM). The DQPM describes the non-perturbative nature of the sQGP at finite temperature T and baryon chemical potential  $\mu_B$  based on a propagator representation of massive off-shell partons (quarks and gluons) whose properties (characterized by spectral functions with T,  $\mu_B$  dependent masses and widths) are adjusted to reproduce the lQCD EoS for the QGP in thermodynamic equilibrium. We present the results for the jet transport coefficients, i.e. the transverse momentum transfer squared per unit length  $\hat{q}$  as well as the energy loss per unit length  $\Delta E = dE/dx$ , in the QGP and investigate their dependence on the temperature T and baryon chemical potential  $\mu_B$  as well as on jet properties such as the leading jet parton momentum, mass, flavor, and the choice of the strong coupling constant. In this first study only elastic scattering processes of a leading jet parton with the sQGP partons are explored discarding presently the radiative processes (such as gluon Bremsstrahlung). We present a comparison of our results for the elastic energy loss in the sQGP medium with the pQCD results obtained by the BAMPS and LBT models as well as with other theoretical approaches such as lattice QCD and the LO-HTL and also with estimates of  $\hat{q}/T^3$  by the color string percolation model (CSPM) and the JET and JETSCAPE Collaborations based on a comparison of hydrodynamical calculations with experimental heavy-ion data.

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