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Estimation of transport coefficients in an anisotropic QGP using a quasiparticle approach

Tuesday 11 July 2017 17:40 (20 minutes)

We investigate the shear viscosity (η) and electrical conductivity (σ_{el})
of the anisotropic quark-gluon plasma (QGP) medium.
Relativistic Boltzmann kinetic equation has been solved
in the relaxation time approximation to calculate the shear viscosity and electrical conductivity. We use the quasiparticle model to estimate these transport coefficients and discuss the connection between them. We compare the bag model result with the quasiparticle model which give the possible hint to the role of thermal mass in the electrical conductivity of QCD plasma.
We compare our results with the corresponding results obtained in different model as well as lattice calculations for both at zero and finite chemical potential.

List of tracks

Freeze-out, hadronisation and statistical models

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