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Heavy meson interactions in a hadronic gas: chiral symmetry, unitarization and transport properties

Charm and bottom transport coefficients in a light meson gas, such as is formed in the hadronic phase of Heavy Ion Collisions, are obtained within chiral perturbation theory and implementing constraints from heavy quark symmetry. By means of unitarization of the lowest order heavy-light meson scattering amplitudes, the D/B_0 and D/B_1 resonant states are dynamically generated in the isospin 1/2 channels in good agreement with experimental data, a feature that leads to a more efficient heavy flavor diffussion in the hadronic medium.
We discuss the temperature and momentum dependence of the friction and diffusion coefficients of heavy mesons in a transport approach, in a wide range of temperatures up to about $T \simeq 150$ MeV.
A comparison with other recent results and implications for heavy meson spectrum observables in Heavy Ion Collisions are discussed.

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