Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



Contribution ID: 327 Type: Poster

Medium Effects on Transport Coefficients of a Hadron Gas

Tuesday 29 September 2015 16:30 (2 hours)

We evaluate transport coefficients in the kinetic approach explicitly including medium effects in the collision term. For the case of a pion gas the temperature dependence of shear and bulk viscosities as well as thermal conductivity evaluated in the Chapman-Enskog approach show significant medium dependence which enter via the pion-pion scattering cross-section. The in-medium rho and sigma propagators used here also affect the relaxation of dissipative flows evaluated using the Grad'd 14-moment method. Results for a interacting gas of pions and nucleons will be presented.

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Session Classification: Poster Session

Track Classification: Collective Dynamics