



# XXIV QUARK MATTER DARMSTADT 2014

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## The fluidity of a hot hadronic soup

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The ratio  $\eta/s$  of the shear viscosity,  $\eta$ , and the entropy density,  $s$ , of hot interacting hadrons is calculated using the Chapman-Enskog and virial expansion methods. Interactions are parametrized using the K-matrix which preserves the unitarity of the S-matrix. In the four component mixture  $\pi$ -K- $\eta$ -N, 57 resonances up to 2 GeV are included. Increasing number of resonances is shown to reduce  $\eta$  and increase  $s$  resulting in a progressive decrease of  $\eta/s$  for temperatures close to the QCD phase transition temperature. Prospects of hot hadrons becoming a “perfect” fluid are discussed.

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