

Beam energy dependence of the viscous damping of anisotropic flow

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Measurements of the beam energy dependence of anisotropic flow can provide crucial insight on the baryon chemical potential (μ_B) and temperature (T) dependences of viscous damping and its associated specific shear viscosity η/s in QCD matter. It has been predicted that the μ_B and T dependence of η/s could be sensitive to the critical endpoint (CEP) in the phase diagram for this matter. We will present and discuss recent STAR measurements of the anisotropic flow coefficients v_n ($2 \leq n \leq 5$) as a function of harmonic number (n), transverse momentum (p_T), and centrality in Au+Au collisions across the full span of BES-I energies (7.7 – 200-GeV). The implications of the extracted excitation function for viscous damping will be discussed as well.

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