Contribution ID: **588** Type: **Parallel Talk**

Collision System Dependence of Anisotropic Flow, Flow Fluctuations and Mixed Harmonic Correlations at STAR Energies

Tuesday 15 May 2018 11:30 (20 minutes)

We present new symmetric cumulant measurements, as well as two-, four- and six-particle v_n measurements (and their ratios) for charged and particle identified hadrons. These measurements will be presented for a broad range of transverse momenta and centrality intervals in U+U collisions at $\sqrt{s_{NN}}$= 193 GeV and Au+Au, Cu+Au, Cu+Cu, d+Au and p+Au collisions at $\sqrt{s_{NN}}$=200 GeV. The measurements indicate the expected trends for hydrodynamic-like viscous attenuation in the medium produced in the different systems, the influence of initial-state fluctuations, system shape (ε), system-size and asymmetry, and the transport coefficients (η/s, ζ/s, ...) on the flow coefficients (v_n). The measurements are also compared to viscous hydrodynamic calculations to pin down the roles of initial-state fluctuations, mixed harmonic correlations and system size and shape (ε). The implication of these measurements for understanding the medium properties of these systems will be discussed.

Content type

Experiment

Collaboration

STAR

Centralised submission by Collaboration

Presenter name already specified

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Session Classification: Initial state physics and approach to equilibrium

Track Classification: Initial state physics and approach to equilibrium