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System Size and Shape Dependence of the Viscous Damping of Anisotropic Flow[1] NISEEM ABDELRAHMAN, Stony Brook university — We present recent STAR measurements of the anisotropic flow coefficients v_n ($n = 1-6$) in Au+Au, Cu+Cu, Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV and U+U collisions at $\sqrt{s_{NN}} = 193$ GeV. For a given system, the differential v_n measurements indicate acoustic scaling patterns which reflect the detailed dependence of v_n on collision-system size and eccentricity (ε_n). These measurements constrain the viscous coefficient which encodes the specific shear viscosity η/s. Our measurements show that all the collision-systems give the same viscous coefficient after scaling-out the collision-system size and eccentricity.

[1]For the STAR Collaboration

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