

Abstract Submitted
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System size dependence of collective flow in Cu+Cu and Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV DAMIAN REYNOLDS, PHENIX, PHENIX COLLABORATION — The study of collective flow has been instrumental in estimating the transport coefficient η/s of the quark gluon plasma (QGP), as well as for detailed insights into initial state fluctuations. Given the smaller system size produced in Cu+Cu collisions, viscous effects and fluctuations are expected to play a more important role in these collisions than in Au+Au collisions. Recent $v_{2,3}$ measurements obtained by the PHENIX experiment employ a two-particle azimuthal correlation method involving the azimuthal angle difference ($\Delta\phi$) between the charge-weighted hits in the Beam-Beam Counters (BBC) and tracks in the central arms of PHENIX. This technique ensures the large pseudorapidity gap necessary for minimizing non-flow effects. Results from these measurements will be presented and discussed.

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