## 2019 Meeting of the Division of Particles & Fields of the American Physical Society



Contribution ID: 462 Type: Oral Presentation

## Beam energy dependence of the azimuthal anisotropic flow from RHIC

Tuesday, 30 July 2019 17:40 (20 minutes)

Measurements of the beam-energy dependence of anisotropic flow can provide important constraints for initial state models and for precision extraction of the chemical potential  $(\mu_B)$  and temperature (T) dependence of the QCD matter, specific shear viscosity  $\eta/s$ . It has been predicted that the  $\mu_B$  and T dependence on  $\eta/s$  could be sensitive to the critical endpoint (CEP) in the QCD matter phase diagram\cite{Laszlo}. We will present and discuss recent RHIC measurements of the anisotropic flow coefficients  $v_n$   $(1 \le n \le 5)$  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  $(7.7-200\,{\rm GeV})$ . The implication of these measurements for understanding the medium properties will be discussed.

Primary author: MAGDY, Niseem

Presenter: MAGDY, Niseem

Session Classification: QCD & Heavy Ions

Track Classification: QCD & Heavy Ions