



Contribution ID: 97

Type: not specified

## PHENIX Results on Small Systems from the d+Au Beam Energy Scan

*Tuesday 19 September 2017 18:20 (20 minutes)*

Small system (p+p, p+A, d/He+A) collisions at RHIC and LHC exhibit interesting azimuthal anisotropies, with explanations varying from geometry coupled to final state interactions to glasma diagrams to color recombination. The PHENIX experiment has extended many of these observables, including multi-particle cumulants, to lower energies with the d+Au beam energy scan at 19.6, 39.0, 62.4, and 200 GeV. We present new results on  $v_2$  anisotropies as a function of transverse momentum and pseudorapidity and for various centrality selections. We compare the results with calculations within the framework of viscous hydrodynamics and parton scattering models (with and without final state interactions). We present new results on multi-particle cumulants from the d+Au beam energy scan at 19.6, 39.0, 62.4, and 200 GeV. All energies result in real valued  $v_2\{4\}$ , in contrast to p+Au collisions at 200 GeV where the  $v_2\{4\}$  is imaginary.

**Primary author:** NAGLE, James Lawrence (University of Copenhagen (DK))

**Presenter:** NAGLE, James Lawrence (University of Copenhagen (DK))

**Session Classification:** Small systems / Azimuthal anisotropies