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## Recent results on collective effects in small systems from PHENIX at RHIC (15' + 5')

Thursday, 4 August 2016 14:50 (20 minutes)

Collisions of simple systems, such as p+p, or p+Nucleus have been used as benchmarks for our understanding of Heavy Ion Collisions, since it was assumed they would be free of the effects from hot nuclear matter.⊠

Recently long range correlations and anisotropies of momentum spectra have been seen in such collisions, challenging this assumption. Such phenomena have been understood to be the result of the collective motion, which can best be described by hydrodynamics, whose initial conditions are set by the geometry of the colliding systems, together with their fluctuations. This talk will discuss the recent results from the PHENIX experiment at RHIC using a variety of colliding species (p+Au, d+Au, He3+Au) which give a better understanding of the origin of the observed correlations and anisotropies, thus providing insight as to whether a Quark Gluon Plasma is formed in these simple systems.

**Presenter:** CAMPBELL, Sarah (PHENIX) **Session Classification:** Heavy Ions

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