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Type: **Poster**

## Azimuthal anisotropy of high $p_T$ hadrons via long-range two particle correlations in d+Au and p+p collisions by PHENIX

*Tuesday, May 15, 2018 7:10 PM (30 minutes)*

PHENIX measured two-particle angular correlations between high  $p_T$  ( $2 < p_T < 11$  GeV/c)  $\pi^0$  at midrapidity  $|\eta| < 0.3$  and hadrons emitted at forward ( $3.1 < \eta < 3.9$ ) or backward ( $-3.7 < \eta < -3.1$ ) rapidity in 200 GeV p+p and d+Au collisions at  $\sqrt{s_{NN}}=200$  GeV. In the Au-going direction the azimuthal correlations of these particle pairs with this large rapidity gap exhibit a ridge-like structure. This structure persists up to  $p_T \approx 6$  GeV/c and strongly depends on collision centrality. It is reminiscent of collective behavior in A+A collisions. The ridge-like structure is absent in the d-going direction as well as in p+p collisions.

We present the final results of two particle correlations with a large rapidity gap in 200 GeV d+Au and p+p collisions and discuss the physics implication of the results.

### Content type

Experiment

### Collaboration

PHENIX

### Centralised submission by Collaboration

Presenter name already specified

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