

## **Explore the high-density QCD medium via particle correlations in pPb collisions at CMS**

*Friday, 17 May 2013 14:00 (40 minutes)*

The observation of a long-range, near-side two-particle correlation ("ridge") in very high multiplicity proton-proton and proton-lead collisions has opened up the opportunity of studying collective phenomena in these small systems. High luminosity pPb data were collected by the CMS experiment at the LHC in early 2013. New results of identified particle spectra, two- and multi-particle correlations in pPb collisions from CMS will be presented over a wide event multiplicity and transverse momentum range. A direct comparison of pp, pPb and PbPb systems will be provided. Physics implications, especially in the context of color glass condensate and hydrodynamics models will also be discussed.

**Presenter:** LI, Wei (MIT)