New results on collective phenomena in small colliding systems at CMS

Wednesday, 7 October 2015 11:10 (20 minutes)

New results of two- and multi-particle correlations in pp and pPb collisions will be presented. The measurements are performed as a function of multiplicity. In very-high-multiplicity events, a long-range near-side two-particle correlation is observed. Azimuthal anisotropy harmonics (v_n) are extracted as a function of eta, pT and multiplicity, using two- and multi-particle correlations. Identified particle v_2 and v_3 are also studied for strange hadrons. Possible physics implications of the data are discussed in the context of various theoretical models. New results of two-particle correlations in pp collisions at 13 TeV are compared to lower energy data to study the energy dependence of long-range correlation phenomena.

Primary authors: Dr PETRUSHANKO, Sergey (SINP MSU); CHEN, Zhenyu (CMS)

Presenter: CHEN, Zhenyu (CMS)

Session Classification: Collective Phenomena in High Energy Collisions

Track Classification: Collective Phenomena in High Energy Collisions