

# Quark Matter 2019 - the XXVIIIth International Conference on Ultra-relativistic Nucleus-Nucleus Collisions



Contribution ID: 268

Type: Oral Presentation

## Event shape dependence of anisotropic flow for inclusive and identified hadrons in Pb-Pb and Xe-Xe collisions with ALICE

*Tuesday 5 November 2019 16:20 (20 minutes)*

Anisotropic flow provides valuable information on the key properties and the evolution of the matter created in heavy-ion collisions. In this talk, we present the elliptic and triangular flow of inclusive and identified particles measured in Xe-Xe collisions at  $\sqrt{s_{NN}} = 5.44$  TeV recorded by the ALICE detector. The measurements are reported for a wide range of particle transverse momenta,  $p_T$ , within the pseudo-rapidity region  $|\eta| < 0.8$ . Strong constraints on the initial conditions of a collision and hydrodynamic medium response are placed comparing these results to those from Pb-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV. In addition, the flow harmonics of inclusive and identified particles are studied using Event Shape Engineering technique in Pb-Pb collisions. The effect of the event-shape selection is within uncertainties independent of particle species up to  $p_T \sim 8$  GeV/c and the origin of this observation is discussed.

**Author:** BESOIU FOR THE ALICE COLLABORATION, Mihaela Gabriela (Institute of Space Science (RO))

**Presenter:** BESOIU FOR THE ALICE COLLABORATION, Mihaela Gabriela (Institute of Space Science (RO))

**Session Classification:** Parallel Session - Initial state I

**Track Classification:** Initial state and approach to equilibrium