

Abstract Submitted  
for the DNP20 Meeting of  
The American Physical Society

**Pseudorapidity fluctuations in relativistic heavy-ion collisions with the ALICE detector** RAQUEL QUISHPE, Univ of Houston, ALICE COLLABORATION — Anisotropic flow in relativistic heavy-ion collisions has been studied as a signature of the quark gluon plasma (QGP). For different colliding systems, anisotropic flow has been described by the decomposition of azimuthal correlations into Fourier coefficients. Furthermore, it has been observed that longitudinal correlations also show anisotropies in the medium, which may give further constraints to the QGP and the initial state. These longitudinal correlations can be analyzed and described by orthogonal polynomials, such as Legendre Polynomials. Results from longitudinal correlations coefficients,  $a_n$ , are presented for  $Xe - Xe$  ( $sNN = 5.44 TeV$ ) and  $Pb - Pb$  ( $sNN = 5 TeV$ ) collisions at the LHC.

Raquel Quishpe  
Univ of Houston

Date submitted: 26 Jun 2020

Electronic form version 1.4