

# 10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Contribution ID: 107

Type: Poster

## Longitudinal flow decorrelation in Xe+Xe and $p$ +Pb collisions with the ATLAS detector

*Tuesday 2 June 2020 07:30 (1h 20m)*

ATLAS measurements of longitudinal flow decorrelation using two- and four-particle correlations for harmonics  $n=2$  and  $3$  in Xe+Xe and  $p$ +Pb collisions covering a wide range of transverse momenta and collision centrality are presented and compared with Pb+Pb collisions. The measurements are performed using data from Xe+Xe collisions at 5.44 TeV, Pb+Pb collisions at 5.02 TeV, and  $p$ +Pb collisions at 5.02 and 8.16 TeV. The energy dependence in  $p$ +Pb collisions and the system-size dependence of decorrelation are studied. The measurements provide better understanding of the initial state of heavy-ion collisions and will help in developing full three-dimensional initial-state models.

### Collaboration (if applicable)

ATLAS

### Track

Initial State

### Contribution type

Poster

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**Session Classification:** Poster session

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