



Contribution ID: 752

Type: **Parallel Talk**

## Charged particle correlations with ATLAS

*Saturday, 9 July 2022 17:45 (15 minutes)*

Correlations between charged particles provide important insight about hadronization processes. We present recent results on Bose-Einstein two-particle correlation using ATLAS data at the center-of-mass energy of 13 TeV. Also, if available, the analysis of the momentum difference between charged hadrons in pp, p-lead, and lead-lead collisions of various energies is performed in order to study the dynamics of hadron formation. The spectra of correlated hadron chains are explored and compared to the predictions based on the quantized fragmentation of a three dimensional QCD string (helix).

### In-person participation

Yes

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