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Type: **Parallel Talk**

## Measurements of inclusive jet suppression, azimuthal dependence of jet yields, and jet substructure at $\sqrt{s_{\text{NN}}} = 5.02$ TeV with ATLAS

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A high energy parton is known to lose energy when passing through the hot and dense medium produced in heavy ion collisions. This results in the modification of jet yields and fragmentation patterns. The latest measurements of the nuclear modification factor,  $R_{AA}$ , for  $R = 0.4$  jets in Pb+Pb collisions at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV with the ATLAS detector at the LHC are presented. The analysis is performed over a large range of transverse momentum, up to  $p_{\text{T}} = 1$  TeV, and differentially in jet  $p_{\text{T}}$  and rapidity. The jet yield is also measured as a function of the azimuthal angle with respect to the second- and third-order event planes. The jet azimuthal harmonic coefficients  $v_n$  are derived as a function of centrality and jet  $p_{\text{T}}$  to probe the path length dependence of jet quenching. In addition, a new measurement of the substructure of jets in Pb+Pb and  $pp$  collisions is presented which provides complementary information to jet fragmentation functions.

### Content type

Experiment

### Collaboration

ATLAS

### Centralised submission by Collaboration

Presenter name already specified

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