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## Measurement of jet substructure in pp and central Pb–Pb collisions using semi-inclusive hadron+jet correlations with ALICE

In this talk we present new measurements of semi-inclusive hadron+jet correlations in pp and central Pb–Pb collisions, using the high-statistics data sample of Run 3. Charged-particle jets recoiling from a high- $p_T$  charged hadron trigger are reconstructed with resolution parameters 0.2 and 0.4. We report the distribution of the acoplanarity observable,  $\Delta\varphi$ , defined as the azimuthal angle between the trigger and the recoiling jet. In pp collisions this observable is sensitive to next-to-leading order hadron and jet production, and in Pb–Pb collisions it probes medium-induced decorrelation. We also report a new study of the substructure of recoil jets, measuring the phase-space distance between the Winner-Takes-All (WTA) and Standard jet axes, which probes the distribution of soft radiation in the jet. Such semi-inclusive measurements extend the exploration of substructure measurements to large  $R$  and low jet transverse momentum and can elucidate the physical mechanisms underpinning the striking medium-induced acoplanarity broadening that was recently reported by ALICE.

### Category

Experiment

### Collaboration (if applicable)

ALICE

**Authors:** COLLABORATION, ALICE; NORMAN, Jaime (University of Liverpool (GB))

**Presenter:** NORMAN, Jaime (University of Liverpool (GB))

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