

# Study of jet energy redistribution and broadening via hadron+jet correlations in pp and Pb-Pb collisions with ALICE

Friday 19 July 2024 14:47 (17 minutes)

The measurement of jets recoiling from a trigger hadron provides unique probes of medium-induced modification of jet production. Jet deflection via multiple soft scatterings with the medium constituents may broaden the azimuthal correlation between the trigger hadron and the recoiling jets. The R-dependence of recoil jet yield probes jet energy loss and intra-jet broadening. The hadron+jet results may be sensitive to wake effects due to jet-medium energy transfer at low  $p_T$ .

This talk presents measurements of the semi-inclusive distribution of charged-particle jets recoiling from a trigger hadron in pp and Pb-Pb collisions. We observed a marked medium-induced jet yield enhancement at low  $p_T$  and at large azimuthal deviation from  $\delta\phi \sim \pi$  with large jet resolution parameter R. Comparisons to different model calculations incorporating different formulations of in-medium jet scattering and medium response are also reported.

## Alternate track

### I read the instructions above

Yes

**Primary author:** MAO, Yaxian (Central China Normal University CCNU (CN))

**Co-author:** COLLABORATION, ALICE

**Presenter:** MAO, Yaxian (Central China Normal University CCNU (CN))

**Session Classification:** Heavy Ions

**Track Classification:** 07. Heavy Ions