

Direct γ -hadron correlations in Pb-Pb collisions at $\sqrt{s_{\mathrm{NN}}}=5.02$, TeV with ALICE

Jet modification by the hot and dense medium created in heavy-ion collisions has been demonstrated by a variety of observables.

A modification like the softening and broadening of the jet fragmentation can be probed optimally with direct γ -hadron correlations.

The direct photon, produced in hard scatterings back-to-back with a parton, serves as a calibration of the away side jet and can thus provide less-biased insight into how the medium affects the away side jet fragmentation.

The aim of the presented analysis is to show the modification of the fragmentation function $f(z_T)$ due to the medium and pin down

the energy lost and recovered at different angles away from the jet axis.

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This poster outlines the analysis strategy and performance for γ -hadron correlations with the recently collected Pb-Pb data

at $\sqrt{s_{\mathrm{NN}}}=5.02$, TeV, measured with the EMCal and DCal detectors of the ALICE experiment.

Preferred Track

Jets and High p_T Hadrons

Collaboration

ALICE

Author: EPPLE, Eliane (Yale University)

Presenter: EPPLE, Eliane (Yale University)

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