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# Measurement of Jet Nuclear Modification Factor in PbPb Collisions at $\sqrt{s_{\mathrm{NN}}}$ = 5.02 TeV with CMS

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Inclusive jet spectra in PbPb and pp collisions at 5.02 TeV are measured in data collected by the CMS detector at the LHC during Run 2 in 2015. The measurement is performed for jet transverse momentum greater than 200 GeV/c and a pseudorapidity window of $|\eta| < 2$. The jet nuclear modification factor is extracted for various collision centrality selections to study the impact of jet quenching on jet yields. The measurement is compared to theoretical calculations. The radius dependence of the jet suppression is expected to be sensitive to the jet energy loss mechanism and medium response. Therefore, studies of jets in PbPb and pp are explored for unprecedented large jet radius parameter, ranging from 0.2 to 1.0 with the anti-kt algorithm. The comparative measurement of suppression over small to large radius parameter maps energy loss out of the cone in a theoretically controlled way.

## Content type

Experiment

## Collaboration

CMS

## Centralised submission by Collaboration

Presenter name already specified

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