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Typ: Talk

Search for medium effects using jets from bottom quarks in PbPb collisions a 5.02 TeV with CMS

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Jet quenching, one of the signatures of the quark-gluon plasma, is a well established experimental phenomenon at RHIC and LHC. However, a detailed characterization of the expected dependence of jet-medium interactions on the flavor of the parton initiating the shower is yet to be settled. This talk presents the first b jet shapes measurements in 5.02 TeV PbPb and pp collisions collected by the CMS experiment. Comparisons made with jet shapes of inclusive jets, produced predominantly by light quarks and gluons, allow for experimental observations of the “dead cone” effect in suppressing transverse momenta of constituents at small radial distance from the jet axis. A similar comparison for large distances provides insights on the role of parton mass in the energy loss and possible mass dependence of the medium response.

Experiment/Theory

CMS

Affiliation

CMS

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Track Klassifizierung: Jets and their modification in QCD matter