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## Studies of jet quenching and b-jet tagging in PbPb collisions at 2.76 TeV with CMS

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This presentation describes jet measurements in PbPb collisions at a nucleon-nucleon center-of-mass energy of 2.76 TeV performed with the CMS detector at the LHC.

With data from the 2011 Run, dijet measurements have been extended to large transverse momentum, up to 350 GeV/c. The dijet momentum balance and angular correlations are studied in detail as a function of collision centrality and leading jet transverse momentum. For the most peripheral PbPb collisions, the dijet momentum balance distributions are in good agreement with pp data and with reference calculations at the same collision energy. More central collisions show a strong imbalance between the leading and subleading jet transverse momenta, which is found to persist to the largest values of leading jet transverse momenta studied.

The flavor dependence of jet quenching is a powerful handle to discriminate models of parton energy loss in heavy ion collisions. We demonstrate the capacity of CMS to identify jets initiated by bottom quarks using displaced vertices reconstructed in the silicon tracking system. The b-jet to inclusive jet ratio is measured in PbPb collisions and compared pp collisions at the same center-of-mass energy.

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