

Study of dijet momentum balance and pseudorapidity distributions in pPb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with CMS

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Results on dijet production in pPb collisions at a nucleon-nucleon center-of-mass energy of 5.02 TeV are presented. Jets are reconstructed with the anti-kT algorithm, using combined information from tracking and calorimetry. The dijet momentum balance, azimuthal angle correlations and pseudorapidity distributions are studied as a function of forward calorimeter transverse energy and compared to results from PYTHIA reference calculations representing pp collisions. For pPb collisions, the dijet momentum ratio $p_{T,2}/p_{T,1}$ and the width of the azimuthal angle difference distribution is remarkably insensitive to the forward activity of the collision, and comparable to the same quantity obtained from the simulated pp reference. The pseudorapidity of the dijet system changes monotonically with increasing forward calorimeter activity.

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