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Measurement of the Inclusive Jet Cross Section in pp Collisions at 7 TeV

The measurement of the inclusive jet cross section from pp collisions at a center-of-mass energy of s=7 TeV using data collected by the CMS experiment with an integrated luminosity of about 60 nb-1 and in the pT range of 18-700 GeV is presented. Several different jet reconstruction methods are investigated using an anti-kT clustering algorithm. Studies of the systematic uncertainties in transverse momentum for each reconstruction method are presented, and the measured cross sections are found to be in agreement with next-to-leading order perturbative QCD calculations, within the experimental and theoretical uncertainties.

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