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# Measurement of the inclusive jet and dijet production with the ATLAS detector

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The production of inclusive jets and di-jets at hadron colliders provides a stringent test of perturbative QCD at the highest energies. The process can also be used to probe the gluon density function of the proton. The ATLAS collaboration has measured the inclusive jet production cross section in 20.3 /fb of data collected at a center-of-mass energy of 8TeV and in 3.2 /fb of data collected at a center-of-mass energy of 13TeV. The measurements have been performed differentially in jet rapidity and transverse momentum. The collaboration also presents a measurement of the di-jet cross section at a center-of-mass energy of 13TeV as a function of the di-jet mass and rapidity-difference. The results have been compared with state-of-the-art theory predictions at NLO in pQCD, interfaced with different parton distribution functions. Special focus is drawn on the correlation models of the associated systematic uncertainties and the interpretation of the chi2-values resulting from theory comparisons. The 13 TeV measurements have also been compared with the more recent NNLO predictions.

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