XXI International Workshop on Deep-Inelastic Scattering and Related Subjects



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Inclusive jet production measured with ATLAS, and constraints on PDFs

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Inclusive jet and dijet double-differential cross sections have been measured in proton-proton collisions at a centre-of-mass energy of 2.76 and 7 TeV using the ATLAS detector. The cross sections were measured using jets clustered with the anti-kT algorithm. The data are compared to expectations based on next-to-leading order QCD calculations corrected for non-perturbative effects, as well as to next-to-leading order Monte Carlo predictions.

The ratio of cross section measurements at 2.76 and 7 TeV allows to reduce experimental and/or theoretical uncertainties substantially. An NLO QCD analysis of the data indicates some constraining power for the gluon density.

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