Measurement of Differential Z/gamma+jet+X Cross Sections with the D0 Detector

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We present measurements of differential cross sections in inclusive Z/gamma plus jet production in a data sample of 1fb-1 collected with the D0 detector in proton antiproton collisions at sqrt(s)=1.96TeV. Measured variables include the Z/gamma transverse momentum (pT-Z), and rapidity (y-Z), the leading jet pT (pT-jet), and rapidity (y-jet), as well as various angles of the Z+jet system. We compare the results to different Monte Carlo event generators and to next-to-leading order perturbative QCD (NLO pQCD) predictions, with non-perturbative corrections applied.

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