

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

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 $\sqrt{s}=1.96\text{TeV}$. Measured variables include the Z/gamma transverse momentum (p_{T-Z}), and rapidity ($y-Z$), the leading jet p_T (p_{T-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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