INCLUSIVE HIGH-\(p_{\perp}\) \(b\bar{b}\) CROSS SECTION MEASUREMENT

AT \(\sqrt{s} = 1.96\) TeV

Abstract

by

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The Run II physics program at the Tevatron started in the spring of 2001 with protons and antiprotons colliding at an energy of \(\sqrt{s} = 1.96\) TeV, and is continuing with about 1.2 fb\(^{-1}\) of data currently collected by the CDF and DØ experiments. A measurement of the \(b\)-jet cross section as function of jet transverse momentum \(p_{\perp}\) has been performed using 312 pb\(^{-1}\) of DØ data. The results for this measurement were obtained and are presented herein. A neural network algorithm was used to identify \(b\) jets.