

Abstract Submitted
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Measurement of Z+b-jet production cross section and ratio $\sigma(\mathbf{Z+b jet})/\sigma(\mathbf{Z+jet})$ at D0 KENNETH SMITH, State University of New York, Buffalo, D0 COLLABORATION — The inclusive Z+b jet production is an important background to searches for the Higgs boson in associated ZH production at the Fermilab Tevatron collider. We present measurements of the ratio of inclusive cross sections for $p\bar{p} \rightarrow Z + b \text{ jet}$ to $p\bar{p} \rightarrow Z+\text{jet}$ production as well as inclusive $Z + b$ jet cross section. The measurements use a data sample from $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV corresponding to an integrated luminosity of 5.4 fb^{-1} collected by the D0 detector. Z bosons are selected in the electron and muon decay modes. The measurements are compared with the next-to-leading order theoretical predictions.

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