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Measurement of Z boson production in association with heavy flavor jets at D0 JOSEPH ZENNAMO, SUNY Buffalo, D0 COLLABORATION — Associated production of a Z boson with a charm or bottom quark can serve as an important test of perturbative quantum chromodynamic calculations. The ratios of cross sections, $\sigma(Z + c\,\text{jet})/\sigma(Z + \text{jet})$ and $\sigma(Z + c\,\text{jet})/\sigma(Z + b\,\text{jet})$ are measured for associated production of a Z boson with jets as a function of the jet and Z boson transverse momentum. Measurements use data collected by the D0 detector in Run II of the Tevatron $p\bar{p}$ collider at a center-of-mass energy of 1.96 TeV, and correspond to an integrated luminosity of 9.7 fb^{-1}. Results are compared to predictions from next-to-leading order calculations and various Monte Carlo event generators.

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