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Measurement of Relative Fragmentation Fractions of Bottom Hadrons with CDF PHILIPPE ROY, McGill University, CDF COLLABORATION — Fragmentation is the process by which bare quarks dress themselves up as hadrons. Since we cannot get reliable calculations of this process using perturbative QCD, the fragmentation properties of quarks must be obtained empirically. We report the first measurement of relative fragmentation fractions of b quarks to B hadrons using fully reconstructed decays of B^0, B_s^0 and Λ_b in 1.4 fb^{-1} of data taken with the CDF II detector. In order to reduce systematic uncertainties, arising from the poor knowledge of the b quark production cross section in $p\bar{p}$ collisions or absolute determinations of trigger and tracking efficiencies, ratios of b quark fragmentation fractions are measured.

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