

Abstract Submitted
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Top Quark Mass Measurement in Lepton+Jets Channel Using the Transverse Decay Length of b-Hadrons from Top Decays CHRIS HILL, UC Santa Barbara, CDF COLLABORATION — We have developed a novel method to measure the mass of the top quark using the transverse decay length of b-hadrons from top decays. This technique relies solely on tracking and thus avoids the jet energy scale uncertainty that is common to all other methods. We have applied this new method to a lepton+jets top sample corresponding to 0.7 fb^{-1} and have extracted a measurement of the top quark mass. While this result is not a competitive measurement by itself, since the decay length technique is uncorrelated with other methods, it will help to reduce the overall uncertainty on the top's mass in combination with other Tevatron measurements.

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