

Abstract Submitted
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Top Quark Mass Measurement in Lepton+Jets Channel Using a Matrix Element Method¹ BRIAN MOHR, UCLA, CDF COLLABORATION — We present a measurement of the mass of the top quark from $p\bar{p}$ to $t\bar{t}$ events in the lepton plus jets channel. We use events from 681 pb⁻¹ of data from collisions at 1.96 TeV observed with the Collider Detector at Fermilab (CDF). The largest systematic uncertainty is convoluted with the statistical error using an in-situ measurement of the hadronic W boson mass. A likelihood is calculated for each event using a leading-order $t\bar{t}$ and W+jets cross-section, and parameterized parton showering. The final measured top quark mass and JES systematic is extracted from a joint likelihood of the product of the individual event likelihoods.

¹For the CDF Collaboration

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