

Abstract Submitted
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Measurement of the top quark mass in the dilepton channel at CDF using a matrix element method ANDREW KOVALEV, University of Pennsylvania, CDF COLLABORATION — We present a preliminary measurement of the top quark mass in events containing two energetic leptons, two jets and missing transverse energy produced in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV, with 340 pb^{-1} collected by the CDF detector. The top quark mass is extracted from the posterior ensemble probability distribution, which is formed by evaluating for each event the differential cross section for top quark pair production and decay as a function of the top quark mass. The differential cross sections for the background processes are treated similarly and are included in the probability evaluation.

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