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Top quark mass measurement in the lepton+jets channel at CDF using a mulitvariate template method PAUL LUJAN, University of California, Berkeley, CDF COLLABORATION — We present a preliminary measurement of the top quark mass using data collected by the CDF II detector at the Fermilab Tevatron from $p\bar{p}$ collisions at $\sqrt(s) = 1.96$ GeV. We reconstruct $t\bar{t}$ events in the lepton + jets channel using a multivariate template method, which uses a matrix element integration with transfer functions relating jet and parton momentum to build a likelihood function for each event as a function of top mass. An additional likelihood cut is used to reject background and poorly-modeled signal events, improving our overall resolution in constructing the final likelihood function to determine the overall top quark mass value.

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