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Measurement of Top Quark Mass by Dynamical Likelihood Method in the Lepton+Jets Channel at CDF TAICHI KUBO, University of Tsukuba — We present a measurement of the top quark mass with the dynamical likelihood method (DLM) using the CDF II detector at Fermilab Tevatron. The data we use in this analysis corresponds to an integrated luminosity of 1.2 fb^{-1}. We use events in the lepton+jets channel with at least one jet tagged as a bottom quark. The likelihood as a function of top quark mass is defined as the differential cross section per unit phase space volume of the final partons, multiplied by the transfer function from jets to parton quantities. The method takes into account all possible parton-jet identifications in an event and the likelihood is multiplied event by event to derive the top quark mass. The jet energy scale (JES) uncertainty is estimated as a statistical uncertainty by calibrating it with the W mass mesurement.

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