

Abstract Submitted
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Measurement of the top quark mass at D0 using the matrix-element method in the lepton+jets channel CARLOS GARCIA, University of Rochester, D0 COLLABORATION — We report on the measurement of the top quark mass using $t\bar{t}$ candidates in the lepton+jets final state. For each event, a probability based on the differential cross section for $t\bar{t}$ production is calculated as a function of the top mass and the overall jet energy scale. The top mass and jet energy scale are extracted by maximizing a likelihood constructed as the product of the single event probabilities. The overall jet energy scale is constraint by the two jets from the hadronic W boson decay.

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