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Top Quark Mass Measurement in the All-Hadronic Channel using a Combined Matrix Element and Template Method at CDF GHEORGHE LUNGU, University of Florida — We present a preliminary measurement of the top quark mass in the all-hadronic channel, using 1 fb^{-1} of $p\bar{p}$ collisions at $\sqrt{s}$ = 1.96 TeV collected at the Collider Detector at Fermilab. Assuming standard model $t\bar{t}$ production and using the matrix element as a weight, an event probability is calculated. The top quark mass is reconstructed for each event by maximizing the event probability, and so Monte Carlo templates are produced, dependent of the true top quark mass and the jet energy scale. The most likely top mass is extracted by fitting the data to the templates distributions.

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