## Abstract Submitted for the APR11 Meeting of The American Physical Society

A Matrix Element Analysis measurement of the Top Quark Mass in the hadronic tau + jets channel with an in situ Jet Energy Scale measurement from W to jj DARYL HARE, Rutgers University, CDF COLLABORATION — We use a 2D unbinned likelihood fit, as used in previous precision top quark mass measurements, with events from lepton + jet top quark decays where the lepton has been identified as a hadronically decaying tau. We use ppbar collisions at 1.96 TeV at CDF. Events require a single lepton identified as a hadronic tau, missing Et, and 4 jets of which at least one must be tagged as a b jet. The likelihood fit is based on per-event probabilities calculated from leading-order signal (ttbar) and background (W+jets) matrix elements. Our goal is to directly identify this final state for the first time as well as provide a top quark mass measurement in this decay channel.

Eric James FNAL

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