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Di-lepton Top Quark Mass Measurement with the Neutrino Weighting Algorithm SIMON SABIK, University of Toronto — We report a measurement of the Top Quark Mass using approximately 340 pb^{-1} of data from $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ GeV at CDF Run II. We select $t\bar{t}$ candidates that are consistent with two W bosons decaying leptonically. Only one of the two charged leptons is required to be identified as an electron or a muon candidate, while the other is simply a well measured track. Using the Neutrino Weighting Algorithm to reconstruct a top quark mass in each event and comparing the resulting distribution to Monte Carlo templates, we measure the top quark mass.

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