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Measurement of forward-backward asymmetry in top quark production at CDF GLENN STRYCKER, University of Michigan, CDF COLLABORATION — We measure a forward-backward charge asymmetry in the rapidities of top quarks produced in $p\bar{p}$ collisions at $\sqrt{s}$=1.96 TeV. The $t\bar{t}$ kinematics are reconstructed in 800 lepton+jets events collected in a 3 fb^{-1} exposure with CDF detector at Fermilab. We present two independent techniques – a model independent unfold and a likelihood fit to a linear asymmetry in the production angle $(1 + Acos(\alpha))$ – that give consistent results for the parton level asymmetry in both the laboratory and $t\bar{t}$ rest frames. The results are compared to the small charge asymmetry expected in QCD at NLO.

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