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Top Antitop Mass difference LIANG LI, University of California, Riverside, D0 COLLABORATION — We update the previous D0 measurement of the mass difference between top and antitop quarks in lepton+jets final states produced in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV. The $t\bar{t}$ purity of the lepton+jets sample is enhanced by applying a neural-network-based *b*-tagging technique. Using the Matrix Element approach developed at D0, the combination of the e+jets and mu+jets channels in data corresponding to 3.6 fb⁻¹, is used to extract a $t\bar{t}$ mass difference.

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