

Abstract Submitted  
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**Precision Measurement of  $t\bar{t}$  Production Cross Section using Lepton+Jets Events with Advanced b-Tagging Techniques<sup>1</sup>** MICHAEL MCFARLANE, LBNL, CDF COLLABORATION — We present the measurement of the  $t\bar{t}$  production cross section using events with one charged lepton and jets from  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV. In these events heavy flavor quarks from top quark decay are identified using advanced multivariate b-tagging technique with the existing secondary vertex taggers SecVtx and JetProb, as well as other jet kinematic variables. The measurement uses the data collected up to Fall 2005 by the Collider Detector at Fermilab (CDF), which corresponds to an integrated luminosity of about  $700 \text{ pb}^{-1}$ . Results are consistent with Standard Model  $t\bar{t}$  production.

<sup>1</sup>For the CDF Collaboration

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