

Abstract Submitted  
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**Measurement of the Top Pair Production Cross Section in Lepton+Jets Final States at DØ Using Lifetime b-Tagging** GUSTAVO OTERO Y GARZON, University of Illinois at Chicago, DZERO COLLABORATION — Measurement of the top quark pair ( $t\bar{t}$ ) production cross section at hadron colliders can be used to test perturbative QCD predictions. Within the Standard Model, the top quark almost always decays to a  $W$  boson and a  $b$  quark. We present a measurement of the  $t\bar{t}$  production cross section at  $\sqrt{s} = 1.96$  TeV in  $p\bar{p}$  collisions using approximately  $230 \text{ pb}^{-1}$  of data collected by the DØ experiment during Run II of the Fermilab Tevatron collider. The  $t\bar{t}$  production cross section is measured in lepton+jets final states based on the application of two different lifetime-tagging techniques.

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