Abstract Submitted
for the APR08 Meeting of
The American Physical Society

Measurement of the ttbar Cross Section in the Lepton+track Channel with the D0 Detector ROBERT WAGNER, Princeton University, D0 COLLABORATION — The production cross-section for top-antitop quark pairs from proton-antiproton collisions at $\sqrt{s} = 1.96$ TeV was measured in the dilepton channel. The top quark decays almost exclusively to a Wb final state, and in the dilepton channel both of the W bosons from the top-antitop pair decay into either an electron or muon, possibly through an intermediary tau. The measurement was made using a lepton+track selection method, which selects events where only one lepton was fully identified by the detector and the second lepton is identified by an isolated track in the tracking system. The lepton+track selection is added to the fully identified channels to increase the sensitivity of the combined dilepton channel measurement. This work was performed at the D0 detector at the Tevatron collider, using about 1 fb^{-1} of integrated luminosity.

Graham Wilson
University of Kansas

Date submitted: 08 Jan 2008 Electronic form version 1.4