

Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Measurement of the $t\bar{t}$ Production Cross Section in the Lepton+Jets Channel with Lifetime Tagging DOOKEE CHO, Boston University, SEHWOOK LEE, Iowa State University, D0 COLLABORATION — We present a measurement of the production cross section at a center-of-mass energy of 1.96 TeV. This analysis is based on the selection of events with one charged lepton (electron or muon), missing transverse energy, and 3 or more jets. We utilize the e+jets and mu+jets data samples corresponding to integrated luminosity of 4 fb^{-1} collected using the D0 detector. To help distinguish the signal from the background processes, we use a neural network algorithm that uses lifetime information to identify the b-quark jets that are associated with top quark decays. We require at least one b-tagged jet to be identified in this analysis.

Elizaveta Shabalina
II. Physikalisches Institut, Universität Göttingen

Date submitted: 06 Jan 2009

Electronic form version 1.4