

APR09-2009-000716

Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Sorting Category: A19. (E)

Search for non-standard model top antitop resonance production in the all-hadronic channel at CDF YURI OK-SUZIAN, University of Florida, CDF COLLABORATION — We present an updated result of a search for resonant top-antitop pair production and subsequent decay in the all-hadronic channel. We examine the top-antitop invariant mass spectrum observed in CDF data from 1.96 TeV $p\bar{p}$ collisions at the Fermilab Tevatron. We apply a powerful reconstruction technique where the observed event kinematics are constrained according to the full standard model top-antitop production and decay matrix element. This technique provides excellent mass resolution. Also, probability densities from the per-event matrix element calculation are used as discriminants to reduce and control the large backgrounds of the all-hadronic channel.

Prefer Oral Session
 Prefer Poster Session

Florencia Canelli
canelli@uchicago.edu
University of Chicago/Fermilab

Date submitted: 09 Jan 2009

Electronic form version 1.4