## Abstract Submitted for the APR05 Meeting of The American Physical Society

Search for  $t\bar{t}$  Resonance at CDF with kinematics. BRANDON PARKS, Ohio State University, CDF COLLABORATION — Currently, the Fermilab Tevatron is the only accelerator capable of producing the top quark. More than 340  $pb^{-1}$  of data has been collected using the Collider Detector at Fermilab. This data sample provides an opportunity to search for rare processes involving top quarks. One such process is the decay of a heavy object into top-antitop pairs. We present a method to search for a top-antitop quark resonance using kinematic features of the events. In addition to the status of the current search, we will present the prospects for the future.

Evelyn Thomson University of Pennsylvania

Date submitted: 14 Jan 2005 Electronic form version 1.4