

Abstract Submitted  
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**Measurement of the single top production cross section in the transverse missing energy plus jets sample** KAROLOS POTAMIANOS, Purdue University, CDF COLLABORATION — Standard model top quarks are produced mostly in pairs at the Tevatron through the strong force. However, the production of a single top quark per process is allowed through electroweak processes. We present a measurement of the the standard model single top production cross-section in proton-anti protons collisions at 1.96 TeV center of mass energy. The data collected with the CDF II detector at the Tevatron collider at Fermilab correspond to an integrated luminosity of  $2.1 \text{ fb}^{-1}$ . Until now, Tevatron experiments searched for single top only in events where one high energy electron or muon has been identified, to suppress the huge QCD background. Here, we look for the first time at events where no electron or muon has been identified, and where tau leptons decay hadronically and are reconstructed as jets in the calorimeter. Thus, we consider a signature of two b-jets, no leptons, and missing transverse energy. We present preliminary results as well as ongoing efforts in this search.

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