## Abstract Submitted for the PSF09 Meeting of The American Physical Society

A Search for Charged Higgs in the decays of pair-produced top quarks at the Tevatron DIEGO MENEZES, Northern Illinois University, SUPRYIA JAIN, University of Oklahoma, DHIMAN CHAKABORTY, Northern Illinois University, MIKHAIL AROV, Louisiana Tech University, DOOKEE CHO, Boston University, PHILLIP GUTIERREZ, University of Oklahoma, HARYO SUMOWIDAGDO, University of California, Riverside, FREDERIQUE BADAUD, FLORENT LACROIX, LPC, Universite Blaise Pascal, D0 COLLABORATION — We present a search for charged Higgs bosons in the mass range  $80 < m_{H^{\pm}} < 155 \, \mathrm{GeV}$ , assuming the decay  $H^+ \to \tau^+ \nu_{\tau}$  (and its charge conjugate). Using  $0.9 \, \mathrm{fb}^{-1}$  of lepton+jets data collected by the D0 detector, at the Fermilab Tevatron  $p\bar{p}$  collider, we find no evidence for signal, and exclude branching ratios  $B(t \to H^+ b)$  at 95% confidence level.

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Date submitted: 19 Oct 2009 Electronic form version 1.4