

Abstract Submitted  
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**Search for a Light NMSSM Higgs Boson at CDF** SCOTT WILBUR,  
University of Chicago, CDF COLLABORATION — We present a search for an  
NMSSM Higgs boson as proposed by Dermisek and Gunion [1]. This model invokes  
a light Higgs with a mass of order  $100 \text{ GeV}/c^2$ , which decays into two CP-odd Higgs  
bosons with  $m_a < 2m_b$ . This CP-odd Higgs is expected to decay principally into  
two  $\tau$  leptons, leaving a four- $\tau$  final state. This decay chain evades the LEP limit of  
 $m_H > 114 \text{ GeV}/c^2$  and is well motivated by the LEP data.

[1] Dermisek, Gunion Phys. Rev. D75, 075019 (2007)

Eric James  
Fermi National Accelerator Laboratory

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