

Abstract Submitted  
for the APR09 Meeting of  
The American Physical Society

**Polarization of  $\Upsilon$  Mesons Produced in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV** JAMES THOME, Carnegie Mellon University, CDF COLLABORATION  
— We measure the polarization of  $\Upsilon$  mesons in the  $\Upsilon(1S)$ ,  $\Upsilon(2S)$  and  $\Upsilon(3S)$  states as a function of their transverse momentum  $p_T$  in the  $s$ -channel helicity frame. The analysis uses  $\Upsilon$  mesons produced in the rapidity range  $|y| < 0.6$ . The measurement is performed using a data sample of  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV with an integrated luminosity of  $> 3 \text{ fb}^{-1}$  collected with the CDF II detector at the Fermilab Tevatron. The results are compared to theoretical predictions.

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Date submitted: 08 Jan 2009

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