

Abstract Submitted  
for the APR08 Meeting of  
The American Physical Society

**A New Measurement of  $B_s$  Mixing Parameters at the D0 Experiment** DEREK STROM, Northwestern University, D0 COLLABORATION — New sources of CP violation are required to explain the universe around us. While CP violation has been extensively studied in the Kaon,  $B_d$ , and  $B^+$  systems, no experimental information is available in the  $B_s$  system. In this presentation, we outline several pioneering studies by the D0 Collaboration that have led to an accurate determination of the width difference in the  $B_s$  system,  $\Delta\Gamma_s$ , and the first determination of the CP violating phase of  $B_s$  mixing,  $\phi_s$ , using information from flavor- tagged decays.

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Date submitted: 08 Jan 2008

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