## Abstract Submitted for the APR05 Meeting of The American Physical Society

Analysis of decay-time dependence of angular distributions  $\operatorname{in} B^0_s \to J/\psi \phi$  and a measurement of the lifetime difference between  $B^0_s$  CP eigenstates LEAH WELTY, Indiana University, DZERO COLLABORATION — We study the decay processes  $B^0_s \to J/\psi \phi$  and  $B^0_d \to J/\psi K^*$  using the first 440 pb<sup>-1</sup> of DØ data. We measure the average lifetime and the relative lifetime difference for the  $B^0_s$  system. We also measure the  $B^0_d$  lifetime (assuming a single-exponential decay), and the P-wave fraction  $R_\perp$  for  $B^0_s$  and  $B^0_d$ .

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