

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**Measurement of  $f_{D_s}$  in  $D_s \rightarrow \mu\nu$  decays** AIDAN RANDLE-CONDE, SLAC, BABAR COLLABORATION — We present a measurement of the branching fraction  $BR(D_s \rightarrow \mu\nu)$  using the complete data-set ( $521 \text{ fb}^{-1}$ ) collected by the BABAR detector at the PEP-II asymmetric-energy  $B$  factory at SLAC. The  $D_s$  yield is determined by a fit to the mass recoiling against reconstructed  $DKX\gamma$  candidates in events of the type  $e^+e^- \rightarrow DKXD_s^*$ , where  $D_s^* \rightarrow D_s\gamma$  and  $X$  represents additional pions from fragmentation. The neutrino yield is determined using the mass recoiling against reconstructed  $DKX\gamma\mu$  candidates. This full-reconstruction method provides high resolution in the neutrino mass and thus good background separation.

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Date submitted: 27 Jan 2010

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