

Abstract Submitted  
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**A search for radiative decays of  $D^0$  mesons** JOE REGENSBURGER,  
The Ohio State University, BABAR COLLABORATION — We search for the radiative decays of  $D^0$  mesons in a data sample corresponding to an integrated luminosity of  $350 \text{ fb}^{-1}$  collected with the BaBar detector at the PEP-II asymmetric-energy  $e^+e^-$  collider at SLAC. Unlike radiative penguin decays observed in the  $B$  sector, radiative decays of charm mesons are expected to occur largely through non-perturbative, long range processes. We will report on our investigation of the Cabibbo-suppressed decay  $D^0 \rightarrow \phi\gamma$  as well as on our search for the previously unobserved Cabibbo-favored decay,  $D^0 \rightarrow \bar{K}^{*0}\gamma$ .

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