

Abstract Submitted
for the APR06 Meeting of
The American Physical Society

Search for Flavor-Changing Neutral-Current Charm Decays at BaBar BRIAN PETERSEN, Stanford University, BABAR COLLABORATION
— We present a search for flavor-changing neutral-current charm meson and baryon decays using data collected by the BaBar experiment. Flavor-changing neutral-current decays occur only through loop diagrams in the Standard Model and are therefore sensitive to certain types of new physics. The strongest constraints at present come from K and B decays, but charm decays are potentially also sensitive to new physics. The analysis will present a search for the decay modes $D^+ \rightarrow \pi^+ \ell^+ \ell'^-$, $D_s^+ \rightarrow K^+ \ell^+ \ell'^-$ and $\Lambda_c^+ \rightarrow p \ell^+ \ell'^-$.

James Olsen
Princeton University

Date submitted: 05 Jan 2006

Electronic form version 1.4