Abstract Submitted
for the APR05 Meeting of
The American Physical Society

Search for exclusive two body decays $B \to D_s{}^* h$ at Belle R. LUMINDA KULASIRI, University of Cincinnati, BELLE COLLABORATION — We report results of a search for $B^0 \to D_s{}^{*+}\pi^-$, $B^+ \to D_s{}^{*+}\pi^0$ and $\bar{B}^0 \to D_s{}^{*+}K^-$ in data collected at the $\Upsilon(4S)$ resonance by the Belle detector at the KEKB e^+e^- collider. $B^0 \to D_s{}^{*+}\pi^-$ and $B^+ \to D_s{}^{*+}\pi^0$ decays may be used to measure the magnitude of the CKM matrix element V_{ub}. The rate for the process $B^0 \to D_s^*\pi^+$ can be related to that for the process $B^0 \to D^{*+}\pi^-$. The latter is needed to extract $\sin(2\phi_1 + \phi_3)$ from a measurement of time-dependent CP asymmetries in $B \to D^*\pi$ decays. $\bar{B}^0 \to D_s{}^{*+}K^-$ decays may provide information on W-exchange diagrams and final state interactions. This search was performed using 2.75×10^8 $B\bar{B}$ pairs.

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Date submitted: 06 Jan 2005 Electronic form version 1.4