

Abstract Submitted
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study of $B^0 \rightarrow \phi K_s^0$ and $\Lambda_b \rightarrow \phi \Lambda$ decays at CDF MATTHEW RUDOLPH, Johns Hopkins, CDF COLLABORATION — Using over 330 pb^{-1} of Run II data collected by the CDF detector, we evaluate the prospects for reconstructing gluonic penguin decays $B^0 \rightarrow \phi K_s^0$ and $\Lambda_b \rightarrow \phi \Lambda$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96 \text{ TeV}$. The $K_s^0 \rightarrow \pi^+\pi^-$ and $\Lambda \rightarrow p^+\pi^-$ decays are reconstructed using a dedicated algorithm, which is studied using $D^0 \rightarrow \phi K_s^0$ decays.

Matthew Rudolph
Johns Hopkins

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