

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Measurement of the branching fractions of $B_s^0 \rightarrow D_s^{(*)+} D_s^{(*)-}$ decays at CDF DOMINIK HORN, MICHAEL FEINDT, THOMAS KUHR, Karlsruhe Institute of Technology (KIT), MICHAL KREPS, Department of Physics, University of Warwick, CDF COLLABORATION — The CDF collaboration reports on an improved measurement of $B_s^0 \rightarrow D_s^{(*)+} D_s^{(*)-}$ branching fractions using 5.3 fb^{-1} of data. The D_s^+ meson is reconstructed by selecting two narrow mass bands of phase space of the $KK\pi$ final state and accounting for the full $KK\pi$ Dalitz structure in the reconstruction efficiencies for the first time. Assuming the semi-inclusive final state $D_s^{(*)+} D_s^{(*)-}$ to be predominantly CP even and CP violation in B_s^0 mixing negligible, this measurement probes directly the relative decay width difference $\Delta\Gamma_s/\Gamma_s$.

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Date submitted: 13 Jan 2011

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