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Measurement of the branching fraction for D0-¿Ks0Ks0pi+pi- and search for CP violation via T-odd triple product asymmetry[1] AMAN SANGAL, ALAN SCHWARTZ, University of Cincinnati, BELLE COLLABORATION COLLABORATION — We measure the branching fraction for $D^0 \to K^0_s K^0_s \pi^+ \pi^-$ decays and also search for CP violation by measuring a T-odd triple-product asymmetry. We use a data sample corresponding to an integrated luminosity of 932 fb^{-1}. The data were collected by the Belle detector at the KEKB e^+e^- collider running at the $\Upsilon(4S)$ and $\Upsilon(5S)$ resonances. In the Standard Model (SM), CP violation is expected to be very small in charm decays; thus an observed signal could indicate physics beyond the SM. The T-odd observable measured is $C_T = P_{K^0_s} \cdot (P_{\pi^+} \times P_{\pi^-})$. The difference in this observable between D^0 and $\overline{D}^0$ decays provides a measure of CP violation free from strong interaction effects.

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