



Contribution ID: 916

Type: **Parallel Talk**

Search for CP violation and rare decays in charm sector at Belle

Friday, 7 July 2017 18:30 (15 minutes)

Using more than 920fb^{-1} data collected with the Belle detector at the KEKB asymmetric-energy e^+e^- collider, we report the first measurement of the T-odd moments in the decay $D^0 \rightarrow K_S^0 \pi^0 \pi^+ \pi^-$ and the first observation of the radiative charm decay $D^0 \rightarrow \rho^0 \gamma$. We search for CP-violation in decays $D^0 \rightarrow K_S^0 K_S^0$, $D^+ \rightarrow \pi^+ \pi^0$, $D^0 \rightarrow \omega \gamma$ and $D^0 \rightarrow K^* \gamma$. All the results are consistent with no CP violation. We also report the result from the first search for D^0 decays to invisible final states. No significant signal yield is observed and an upper limit is set on the branching fraction at 90% confidence level.

Experimental Collaboration

Belle

Presenter: NAYAK, Minakshi (Indian Institute of Technology Madras)**Session Classification:** Flavour and symmetries**Track Classification:** Flavour Physics and Fundamental Symmetries