



Contribution ID: **1108**

Type: **Poster**

Tests of CPT Symmetry in $B^0 - B^0\text{bar}$ Mixing and in $B^0 \rightarrow c \text{ cbar } K^0$ Decays

Monday, August 8, 2016 6:30 PM (2 hours)

Using the C_i and S_i values of the eight rates $N_i \sim \exp(-\Gamma t) (1 + C_i \cos(\Delta m t) + S_i \sin(\Delta m t))$ for the decays $Upsilon(4S) \rightarrow B^0 B^0\text{bar} \rightarrow f_1 f_2$, with $f_1 = l \nu_X$ before and after $f_2 = c \text{ cbar } K_S$ (KL) as measured by the BABAR experiment with the full data set of 470 million $B B\text{bar}$ events [PRL 109, 211801 (2012)], we determine the three CPT-sensitive parameters $\text{Re}(z)$, $\text{Im}(z)$ and $|A/A\text{bar}|$, where A and $A\text{bar}$ are the amplitudes for $B^0 \rightarrow c \text{ cbar } K^0$ and $B^0\text{bar} \rightarrow c \text{ cbar } K^0\text{bar}$ decays, respectively. The results are in agreement with CPT symmetry.

Presenter: EIGEN, Gerald (University of Bergen)

Session Classification: Poster Session

Track Classification: Quark and Lepton Flavor Physics