

## Search for CP violation in charm and beauty sectors

Speaker: Liang Sun (University of Cincinnati)

Time: 11:00 am, January 08, 2015

Place: Room B324

Organized by the Experimental Physics Division

**Abstract:** This talk mainly focus on two analysis work in both BABAR and LHCb experiments. Based on the full BABAR dataset of 471 million  $B\bar{B}$  pairs, the branching fraction of  $B \rightarrow X_s l^+ l^-$  is measured, and the direct CP violation is searched from a sum of exclusive final states. Also with  $3 \text{ fb}^{-1}$  PP collision data from LHCb, the  $D^0 - \bar{D}^0$  mixing and CP violation are measured using  $D^{*+} \rightarrow D^0 \pi^+$  decays. Also two ongoing analyses based on the full BABAR dataset will be covered. One is the measurement of  $M(D^{*+}) - M(D^+)$  from  $D^{*+} \rightarrow D^+ \pi^0$ . And the other is the time-dependent amplitude analysis of  $D^0 \rightarrow \pi^+ \pi^- \pi^0$  with the  $D^0 - \bar{D}^0$  mixing parameters extracted.

***\*\*Food and drinks will be served after the seminar.\*\****