



# LHC Seminar

SPEAKER: Sevda Esen (Ruprecht-Karls-Universitaet Heidelberg (DE))

TITLE: **Measurement of the Bs mixing phase at LHCb**

DATE: Tue 18/11/2014 11:00

PLACE: Council Chamber

## ABSTRACT

At scales that are not accessible by direct searches at the LHC, precision measurements of CP violating observables in the mixing and decay of B mesons may reveal new physics through loop corrections. A good candidate for such indirect searches is the measurement of the CP violating phase  $\phi_s$  which arises in the interference between the amplitudes of Bs meson decaying directly and after oscillation via  $b \rightarrow cc$  transitions. This talk will cover recent measurements of  $\phi_s$  from  $B_s \rightarrow J/\psi K_S$  and  $D_s D_s$  decays at LHCb. Additionally, estimates of possible penguin contributions which are assumed to be zero in SM predictions will be discussed.