

## Séminaire LAL

**Matthew Kenzie (CERN)**

**Mardi 3 mai 2016 à 11h00**

### *Results of LHCb combination of CKM angle gamma*

The CKM angle  $\gamma$  is the least well known constraint of the  $B_0$  unitarity triangle and is a vital measurement for understanding CP violation in the Standard Model. Any inconsistency between direct and indirect determination of  $\gamma$  would be a clear sign of new physics.

It can be accessed by, theoretically clean, tree level decays of  $B^{+} \rightarrow D_0 K^{+}$  and  $B^{+} \rightarrow D_0 \bar{K}^{+}$ , where the  $D_0$  and  $D_0 \bar{K}^{+}$  decay to the same final state. An updated combination of several LHCb measurements is presented for which  $\gamma$  is found to be  $(70.9 \pm 7.1 \pm 8.5)$  degrees. This is the most precise single-experiment measurement of  $\gamma$  to date.

**Salle 101** - Bât. 200, Orsay

*Thé et café seront servis 5 mn avant le séminaire*

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