



## *Séminaire du Laboratoire de l'Accélérateur Linéaire*

**Takeo Higuchi**

KEK/Belle, Japan

**Jour inhabituel**

**Vendredi 10 Décembre 2010 à 11 :00**

## **Time-dependent Analysis in Belle - CPT Violation Measurement and Others**

It is regarded a very strict fact that the physics rules never change under the CPT transformation. The CPT violating parameter can be probed through proper time difference distributions of the two-B-meson decay. We present a preliminary measurement of the CPT violating parameter using 535M BB pairs decaying to one of  $J/\psi K^0$ ,  $D^{(*)}h$ , and  $D^*\ell\nu$  modes, which are collected with the Belle detector.

The measurement requires extremely precise calibrations of the proper time difference to reduce systematic uncertainties. Experimental technique employed here was established at the first Belle's CP violation measurement published in 2001. And we have presented several CP violation measurements radically over the decade operation of Belle, with polishing the technique eventually. In the presentation, we also present Belle's experimental technique of the precise proper time difference measurement.

**Auditorium Pierre Lehmann du LAL - Bât. 200, Orsay**

Thé et café seront servis 1/4 h avant le séminaire

Responsables : N.Leroy (leroy/lal.in2p3.fr) - B. Viaud (viaud/lal.in2p3.fr)  
<http://www.lal.in2p3.fr>