



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

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**Mardi 29 Mars 2011 à 11 :00**

## **Quarkonium production at LHCb**

LHCb is one of the four LHC experiments which started collecting pp collisions data in 2010 at a centre- of-mass energy of 7 TeV. With its forward geometry, LHCb is dedicated to the study of heavy-flavor production and decay. The solid understanding of the muon triggers and identification is a crucial milestone towards the sophisticated analyses searching for new physics or CP violation in B decays. We present the study of the production of quarkonia resonances in the dimuon sample collected in the first year of data taking, corresponding to up to  $35 \text{ pb}^{-1}$ . The promptly-produced  $J/\psi$  and  $\psi(2S)$  are separated from the b-hadron decay products using topological information. We will discuss the measurements of the double differential production cross-section of  $J/\psi$  and Upsilon states, as well as their impact on the understanding of quarkonia production. The results will be shown in the framework of different theory models.

**Salle 101 du LAL - Bât. 200, Orsay**

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



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