

Séminaire du Laboratoire de l'Accélérateur Linéaire

Vladik Balagura

ITEP & CERN

Mardi 2 Fevrier 2010 à 11 :00 Luminosity measurement at LHCb

The relative luminosity in LHCb is monitored in the randomly triggered events with quantities easily measurable online and proportional to the instantaneous luminosity, like the number of tracks or vertexes, occupancies, transverse energy deposition in the calorimeter. The information is stored in a very condensed format in a dedicated data stream. The absolute luminosity is measured using $pp \rightarrow ZX \rightarrow \mu^+\mu^-X$ and two-photon $pp \rightarrow \mu^+\mu^-pp$ reactions with known cross- sections, van der Meer separation scan and, finally, by studying beam profiles measured with beam- gas interactions. The first results on LHC beam parameters obtained with LHCb December beam-gas data will be reported.

Salle 101 du LAL - Bât. 200, Orsay

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

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