LABORATOIRE DE L'ACCÉLÉRATEUR LINÉAIRE

Séminaire LAL

Nansi Andari
(University of Birmingham)

mardi 23 mai 2017 à 11h00

Measurement of the W-boson mass with the ATLAS detector

A first measurement of the W-boson mass at the LHC is presented based on about 4.6 fb^{-1} of proton–proton collision data recorded in 2011 at a centre-of-mass energy of 7 TeV with the ATLAS detector.
The measured value is 80370±19 MeV, consistent with the Standard Model prediction, with the combined values measured at the LEP and TeVatron colliders, and with the world average. The ATLAS result equals in precision the previous best measurement of the W mass, performed by the CDF collaboration. During the seminar, an overview of the analysis is given with a special emphasis on the evaluation of the experimental systematic uncertainties, as well as on the uncertainties due to the modelling of the vector boson production and decay.

Salle 101 - Bât. 200, Orsay

Thé et café seront servis 15 mn avant le séminaire
Organisation : Reisaburo Tanaka (LAL) - seminaires@lal.in2p3.fr
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