Joint EP/PP/LPCC seminars

SPEAKER: Juan Alcaraz Maestre (CIEMAT (Madrid)/CERN)

TITLE: **CMS results in Electroweak Physics**

DATE: Tue 26/04/2011 11:00

PLACE: Council Chamber

ABSTRACT

We present the results of electroweak studies performed using data collected in 2010 at a center-of-mass energy of 7 TeV by the CMS experiment at the LHC. Besides their intrinsic interest as unique samples to calibrate and understand the CMS detector response to leptons, jets and missing energy, events containing W and Z bosons appear as dominant components in many Higgs seaches and in most of the searches beyond the Standard Model, either as signal or as background. In addition, the excellent level of theoretical and experimental understanding of these processes allows electroweak tests at the LHC at an unprecendented level of precision. CMS uses a wide range of final states to measure cross sections, asymmetries, polarizations and differential distributions in general. The current integrated luminosity is already sufficient to perform not just inclusive measurements using W and Z decays into muons and electrons, but also precise studies of associated jet production and final states containing taus, as well as first measurements of diboson cross sections and associated b-jet production.

Organised by: M. Mangano, M. Spiropulu, G. Unal.....
Tea and Coffee will be served at 10h30