LHC Seminar

SPEAKER: Leonardo Carminati (INFN Sezione di Milano (INFN))

TITLE: **Physics with Photons in ATLAS**

DATE: Tue 05/07/2011 11:00

PLACE: Main Auditorium

ABSTRACT

Measurements of isolated photons give direct access to short distance physics in hadronic collisions, and are an important signature for possible new physics.
The fine granularity ATLAS electromagnetic calorimeter provides a precise measurement of the photon energy and direction, as well as efficient rejection of background from fake photons, while the high precision inner detector allows also the reconstruction of photons that convert into electron-positron pairs.Isolated photons are measured using well-defined infrared-safe isolation criteria corrected for underlying event and the effects of additional proton-proton collisions. Differential cross sections for inclusive photons and diphotons are presented, and the spectrum of diphoton production is used to search for the Higgs boson in this decay channel.

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