



LHC Seminar

SPEAKER: Marco Zanetti (Massachusetts Inst. of Technology (US))

TITLE: **Higgs searches with CMS**

DATE: Mon 12/09/2011 11:00

PLACE: Main Auditorium

ABSTRACT

The excellent performances of the LHC in the 2011 run are setting the grounds for the final chase of the Higgs boson.

The CMS experiment is recording high quality data that are being thoroughly scrutinized. Several decay channels are investigated to probe the entire possible Higgs mass spectrum, from 110 to 600 GeV/c².

The study of the first 1.5/fb of collected data places already tight limits and excludes large fractions of the Higgs mass range, leaving however still open the search in the theoretically favored low mass region.

In this seminar we will report on the diverse CMS analyses that yield to such results describing the experimental challenges that each had to meet.