



LHC Seminar

SPEAKER: **Pedro Silva (CERN)**
TITLE: **Measurements of the top-quark mass and production cross section at CMS**
DATE: Tue 16/10/2012 11:00
PLACE: Main Auditorium

ABSTRACT

Recent measurements of the top mass at CMS are presented, based on several channels and different techniques. The results are combined giving a precise determination of the top mass. The measurements of the $t\bar{t}$ and single top production cross sections at 7 TeV and 8 TeV centre-of-mass energy are reviewed. The $t\bar{t}$ production cross section is utilized to derive a precise determination of the strong coupling constant, the single top cross section is interpreted in terms of the CKM element V_{tb}