



LHC Seminar

SPEAKER: Francesco Spano

TITLE: **Top production measurements with ATLAS: probes at the frontier of the Standard Model**

DATE: 23 Jan 2018, 11:00

PLACE: 40-S2-A01 - Salle Anderson

ABSTRACT

Measurements of the inclusive and differential cross-sections of top-quark production in proton-proton collisions at centre-of-mass energies of 8 and 13 TeV with the ATLAS detector at the Large Hadron Collider are presented. The inclusive measurements reach high precision and are compared to the most precise available theoretical calculations. Differential measurements of the kinematic properties of top-quark events and of top quark pair production associated with photons are also discussed. These measurements, including results using highly boosted top quarks, probe our understanding of top-quark production in the TeV regime. The results are compared to predictions of Monte Carlo generators implementing NLO matrix elements matched with parton showers and NNLO QCD theory calculations and allow for an alternative measurement of the top quark mass.

Organised by: M. Mangano, M. Pepe-Altarelli, G. Unal.....
Refreshments will be served at 10h30