



LHC Seminar

SPEAKER: Giovanni Zevi Della Porta

TITLE: **Anomalous and rare top quarks in CMS**

DATE: 3 Jul 2018, 11:00

PLACE: 222-R-001

ABSTRACT

Top quark production can probe physics beyond the Standard Model in different ways. Some processes, and especially certain angular correlations, are sensitive to the existence of anomalous top quark couplings. This talk reviews the current limits on possible anomalous couplings of the top quark, flavor-changing neutral current searches in the top sector, and Effective Field Theory interpretations using proton-proton collision data collected by CMS at different centre-of-mass energies. A comprehensive set of measurements of rare top quark pair and single top quark production in association with electroweak bosons (W , Z or γ) is also presented. These results are compared to theory predictions and re-interpreted as searches for new physics. The status of the search for four top quark production, to which the LHC experiments are starting to be sensitive, and that has important beyond the Standard Model re-interpretations, is also reported.

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