



LHC Seminar

SPEAKER: Clemens Lange
TITLE: **Search for heavy resonances in diboson final states at CMS**
DATE: 5 Dec 2017, 11:00
PLACE: 40-S2-D01 - Salle Dirac

ABSTRACT

With Run 2 of the LHC in full swing, and very successful data collection at a centre-of-mass energy of 13 TeV, the large dataset collected so far provides a significantly improved sensitivity for discovery of new physics with respect to Run 1. Searches for new resonances in di-boson final states (HH, VH, VV, where $V = W, Z$) with the CMS detector are presented, including new results. The analyses are optimised for high sensitivity over a large range in resonance mass and consider different spin hypotheses. The performance of jet substructure techniques which are used to identify hadronic decays of highly-boosted W, Z, and H are also discussed.