



LHC Seminar

SPEAKER: Viviana Cavaliere (Univ. Illinois at Urbana-Champaign (US))

TITLE: **Searches for New Physics in boosted topologies at ATLAS**

DATE: Tue 15/03/2016 11:00

PLACE: Main Auditorium

ABSTRACT

The large increase in collision energy that the LHC reached in Run 2 provides an unprecedented opportunity to search for new physics beyond the Standard Model (SM). Various extensions of the SM predict heavy resonances at the TeV scale, which couple predominantly to the Higgs and electroweak gauge bosons and to top and bottom quarks. At resonance masses well above 1 TeV, these searches face specific challenges and employ new identification techniques to disentangle the decay products of the boson in highly boosted configurations. This talk will review recent ATLAS Run-2 searches in various possible final states as well as the dedicated techniques related to the specificity of such event topologies.