

Séminaire

Search for the associated production of a Higgs boson and a top quark pair at the LHC

Tamara Vázquez Schröder

McGill University

One of the important tests of the SM is the measurement of the top quark Yukawa coupling, directly measured via the associated production process $pp \rightarrow t\bar{t}H$. The fourfold increase of the $t\bar{t}H$ cross section from $\sqrt{s}=8$ to 13 TeV and the high statistics of top quark sample collected by the LHC experiments allow to increase the sensitivity of the search of this process. Both ATLAS and CMS have performed searches of $t\bar{t}H$ targeting the most relevant Higgs decays modes in final states with multileptons, high b -jet multiplicity or containing two photons, at $\sqrt{s}=13$ TeV. In this talk, the latest results on the search for the $t\bar{t}H$ process with the ATLAS experiment will be discussed, together with a comparison to the CMS performance and an outlook of these measurements with higher statistics.

Mercredi, 14 février 2018, à 14 :30
Pavillon McNicoll, Z-215
Café-biscuits à 14 :00 au V-221

liste des séminaires : <https://feynman.lps.umontreal.ca/en/seminars>
inscription/Subscription : http://www.physics.mcgill.ca/seminars/sem_lists.html

 **GPP** Groupe de Physique des Particules, Université de Montréal