

*Iro Koletsou*  
*(CNRS LAPP IN2P3)*

**Mardi 14 janvier 2020 à 11h00**

## *Vector boson scattering at the LHC*

The scattering of vector bosons is a key process that allow to probe the  $SU(2)_L \rightarrow U(1)_Y$  gauge symmetry of the electroweak theory that determines the self-couplings of the vector bosons. New phenomena beyond the Standard Model (SM) can alter the couplings of vector bosons, generating additional contributions to quartic gauge couplings (QGC) compared with the SM predictions. Direct searches for diboson electroweak production have been performed by the ATLAS and CMS collaborations at the LHC using Run 2 data and lead to the observation of the electroweak  $VVjj$  production in the  $W^\pm W^\pm$ ,  $ZZ$  and  $WZ$  channels and the inclusive and differential cross section measurements. The object of this seminar is the overview of the analyses that lead to the electroweak  $VV$  production by the ATLAS and the CMS experiments, as well as the discussion of the results.

*Salle 101* - Bât. 200, Orsay

### Organisation :

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