



Contribution ID: 300

Type: **not specified**

## Search for a high mass Higgs boson in the $H \rightarrow WW \rightarrow e \nu \mu \nu$ channel in pp collisions at $\sqrt{s}=13$ TeV with the ATLAS detector

*Tuesday 16 May 2017 15:40 (20 minutes)*

A search for a high-mass resonance decaying to  $WW$  is performed in the  $e \nu \mu \nu$  final states using pp collision data collected at  $\sqrt{s}=13$  TeV by the ATLAS detector at the Large Hadron Collider. Different hypotheses are tested, including heavy Higgs with a narrow width approximation and a large width assumption. Three orthogonal event categories are defined for the search: one ggF quasi-inclusive category where the VBF phase spaces are excluded and two VBF categories where the VBF signals are dominant.

### Summary

**Author:** ZHAO, Yongke (Shandong University (CN) & LAL)

**Presenter:** ZHAO, Yongke (Shandong University (CN) & LAL)

**Session Classification:** Posters