

## Same Sign WW Production at $\sqrt{s}=13$ TeV with the ATLAS Detector

*Saturday, 2 December 2017 12:30 (10 minutes)*

Same sign WW boson pairs produced in association with two or more jets (ssWWjj) is a Standard Model process that is sensitive to the mechanism of electroweak symmetry breaking as well as beyond the standard model physics, particularly through one of its production mechanisms, vector boson scattering (VBS). Due to the favorable ratio of electroweak production compared to strong production and the characteristic event topology of the process, ssWWjj production is ideal for studying VBS. The first evidence of same sign WW production was seen by the ATLAS collaboration in 20.3 inverse fb of 8 TeV data, seeing an excess in data of 3.6 sigma over backgrounds [1]. In this talk, the ongoing effort of observing ssWWjj production with 36 inverse fb of 13 TeV data collected with the ATLAS Detector is discussed.

[1] arXiv:1405.6241 [hep-ex]

### Session

Lightning Round (5+3 min)

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**Session Classification:** Lightning Talks