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## Search for Associated Higgs Boson Production in the $WH \rightarrow WW(*) \rightarrow l\nu l\nu qq$ Decay Mode Using 20.3 fb<sup>-1</sup> of Data Collected with the ATLAS Detector at $\sqrt{s}$ = 8 TeV

*Tuesday 17 June 2014 16:00 (15 minutes)*

A search for the Higgs boson in the associated production mode  $WH \rightarrow WW(*) \rightarrow l\nu l\nu qq$  ( $l = e, \mu$ ) performed combining the 20.3 fb<sup>-1</sup> of proton-proton collision data at a centre-of-mass energy of 8 TeV collected in 2012 and the 4.7 fb<sup>-1</sup> of proton-proton collision data at a center-of-mass energy of 7 TeV collected in 2011 with the ATLAS detector. Assuming a Higgs mass of 125 GeV, a 95% CL limit of approximately 6.8 times the Standard Model is set. Major backgrounds and techniques for suppressing them will be discussed. Backgrounds which are not well modelled by Monte Carlo simulation are estimated with data driven methods, or have additional systematic uncertainties estimated with data driven methods assigned to them.

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