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## ATLAS Searches for VH and HH Resonances

*Saturday, July 8, 2017 9:30 AM (15 minutes)*

The discovery of a Higgs boson at the Large Hadron Collider (LHC) motivates searches for physics beyond the Standard Model (SM) in channels involving coupling to the Higgs boson. A search for a massive resonance decaying into a standard model Higgs boson ( $h$ ) and a W or Z boson or two a standard model Higgs bosons is performed. Final states with different number of leptons and where the Higgs decays into a b-quark pair are studied using different jet reconstruction techniques which are complementary in their acceptance for low and high mass transverse momentum. This talk summarizes ATLAS searches for diboson resonances including at least one H bosons in the final state with LHC Run 2 data.

### Experimental Collaboration

ATLAS

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