



Contribution ID: 64

Type: **not specified**

## Vector boson scattering, triple gauge-boson final states and limits on anomalous quartic gauge couplings with the ATLAS detector

*Thursday, 6 April 2017 12:27 (14 minutes)*

Measurements of the cross sections of the production of three electroweak gauge bosons and of vector-boson scattering processes at the LHC constitute stringent tests of the electroweak sector of the Standard Model and provide a model-independent means to search for new physics at the TeV scale. The ATLAS collaboration searched for the production of three W bosons or of a W boson and a photon together with a Z or W boson at a center of mass energy of 8 TeV. ATLAS has also searched for the electroweak production of a heavy boson and a photon together with two jets. Evidence has been found for the exclusive production of W boson pairs. All results have been used to constrain anomalous quartic gauge couplings and have been compared to the latest theory predictions.

**Primary authors:** ESCALIER, Marc (LAL-Orsay (FR)); JOHNSON, Christian (Indiana University (US))

**Presenter:** JOHNSON, Christian (Indiana University (US))

**Session Classification:** WG4 Hadronic and Electroweak Observables

**Track Classification:** WG4) Hadronic and Electroweak Observables