

# 30th International Symposium on Lepton Photon Interactions at High Energies



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## Measurements of multi-boson production including vector-boson scattering at ATLAS

*Wednesday, 12 January 2022 12:00 (20 minutes)*

Measurements of multiboson production at the LHC probe the electroweak gauge structure of the Standard Model for contributions from anomalous couplings. In this talk we present recent ATLAS results on the measurement of electroweak production of a Zgamma pair in association with two jets and the first observation of three W boson production. We also present the differential cross-section measurement of WW production in association with jets and the measurement of differential cross-sections of four-lepton events, containing two same-flavour, opposite-charge electron or muon pairs. Moreover, precise boson and diboson differential cross-section measurements are interpreted in a combined Effective Field Theory analysis, allowing to systematically probe gauge boson self-interactions. New results is available will be also presented.

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**Session Classification:** Precision SM Measurements

**Track Classification:** Standard Model