New Results on Multi-Boson Production with the ATLAS Detector

Thursday, 5 July 2018 17:45 (15 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 also searches for the electroweak production of diboson final states, where evidence was found for the exclusive production of W boson pairs. If available also further results on the electroweak production of diboson pairs will be presented. All results have been used to constrain anomalous gauge couplings and have been compared to the latest theory predictions.

Primary author: PLEIER, Marc-Andre (Brookhaven National Laboratory (US))

Presenters: PLEIER, Marc-Andre (Brookhaven National Laboratory (US)); PLEIER, Marc-Andre (Brookhaven National Laboratory (US))

Session Classification: Top Quark and Electroweak Physics

Track Classification: Top Quark and Electroweak Physics