



SPEAKER: Daniel Froidevaux

TITLE: **Precision Tests of the Electroweak Sector with the ATLAS detector**

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ABSTRACT

The electroweak sector of the Standard Model can be tested either via precision measurements of fundamental observables or via direct tests of its underlying gauge structure. The ATLAS collaboration has recently released a measurement of the effective leptonic weak mixing angle using data collected at a centre-of-mass energy of 8 TeV. The result has a precision similar to that of the most precise individual measurements. The high integrated luminosity delivered by the LHC during Run-2 has allowed ATLAS to observe vector boson scattering processes with WZ and same-sign WW final states. The seminar will present the results from these three milestone analyses, focusing on experimental and theoretical modelling aspects, as well as on the interpretation of the results in the context of the Standard Model.