Contribution ID: **754** Type: **Poster Presentation**

Combination of Higgs boson measurements

Combined measurements of Higgs boson production cross sections and branching fractions are presented using the H->yy and H->ZZ->4l decay channels, based on 36.1 fb−1 of proton-proton collision data recorded by the ATLAS experiment at the LHC at sqrt(s)= 13 TeV. Results are presented for the individual production processes of gluon fusion, vector-boson fusion, WH, ZH, and ttH, and for kinematic subdivisions of these processes using stage 1 of the simplified template cross section framework. The ratios of the extracted Higgs boson couplings to their SM predictions, as well as constraints on coefficients of dimension-6 operators of an effective field theory, are also characterized.

Experimental Collaboration

ATLAS

Primary author: ROZEN, Yoram (Technion (IL))

Presenter: FENG, Eric (CERN)

Session Classification: Poster session

Track Classification: Higgs and New Physics