Contribution ID: **11** Type: **not specified**

Combined SMEFT interpretation of Higgs and electroweak measurements

Friday, 4 November 2022 12:00 (20 minutes)

Standard Model Effective Field Theory (SMEFT) provides a great framework to interpret combined measurements in order to spot the presence of physics beyond the Standard Model at energies that we cannot yet reach with our instruments. Measurements of cross sections, branching ratios and kinematic distributions can be combined in the SMEFT framework to ultimate test the SM without making any strong assumptions on the nature of the new physics we are looking for. I will present the results of the SMEFT interpretation of a combination of Higgs and Electroweak observables using data collected by the ATLAS detector during Run-2. This combination has been made with observables from the Higgs sector and the electroweak sector. Eight precision observables from LEP have also been included with the LHC measurements.

Primary author: VISIBILE, Andrea

Presenter: VISIBILE, Andrea

Session Classification: Parallel