



Contribution ID: 184

Type: **Parallel Sessions**

Measurements and interpretations of Simplified Template Cross Sections, differential and fiducial cross sections in Higgs boson decays to four leptons with the ATLAS detector

Thursday 21 October 2021 15:10 (10 minutes)

Higgs boson decays to four leptons can be selected with a very high purity and are very well suited for measurements of Higgs boson properties, despite the small $H \rightarrow ZZ^* \rightarrow 4l$ branching ratio. This talk will present measurements of differential cross sections, as well as cross section measurements for the different Higgs boson production processes in the Simplified Template Cross Section framework using pp collision data collected at 13 TeV.

Primary authors: ATLAS COLLABORATION; RIU, Imma (IFAE Barcelona (ES))

Presenter: KRISHNAMURTHY, Samyukta (University of Massachusetts (US))

Session Classification: Parallel: Precision and Properties

Track Classification: Higgs-boson precision physics