



Contribution ID : 362

Type : Oral talk

Recent Higgs results by ATLAS and CMS

Tuesday, 29 November 2022 12:50 (35)

The last undiscovered particle of the Standard Model, the Higgs boson, was observed in 2012 by the ATLAS and CMS Collaborations at the Large Hadron Collider at CERN. Since that time the cross sections of main five production mechanisms at $\sqrt{s} = 7, 8$ and 13 TeV pp collisions were measured as well as branching ratios of five decay channels, a mass and a width. It was also established that a spin and a parity of the Higgs boson are $0+$. In addition, differential cross sections on many kinematic variables were measured. No deviations from the Standard Model predictions were observed. The precision of the measurements at the LHC is permanently improving with analyzing new data. This talk summarizes experimental situation with the Higgs boson after ten years of its discovery mostly based on full $\sqrt{s} = 7, 8$ and 13 TeV datasets accumulated by the ATLAS and CMS detectors during Run1 and Run2 of the LHC.

Primary author(s) : TSUKERMAN, Ilya (Ilia)

Presenter(s) : TSUKERMAN, Ilya (Ilia)

Session Classification : Plenary

Track Classification : High energy physics: experiment