



Contribution ID: 23

Type: **theoretical**

## Probing and Distinguishing Representations at the LHC

*Tuesday 5 June 2018 17:15 (15 minutes)*

The discovery made at the Large Hadron Collider (LHC) has revealed that the spontaneous symmetry breaking mechanism is realised in a gauge theory such as the Standard Model (SM) by at least one Higgs doublet. However, the possible existence of other scalar bosons cannot be excluded. We analyze signatures extensions of the SM, characterized by an extra representations of scalars, in view of the recent and previous Higgs data. We show that such representations can be probed and distinguished, mostly with multileptonic final states, with a relatively low luminosity at the LHC.

**Author:** Dr COSTANTINI, Antonio (University of Salento - INFN Lecce)

**Presenter:** Dr COSTANTINI, Antonio (University of Salento - INFN Lecce)

**Session Classification:** Posters session