

Search for heavy resonances in diboson final states at CMS

Monday, 20 May 2019 14:40 (20 minutes)

Searches for new resonances in di-boson final states (VV, VH, HH, where $V = W, Z$) with the CMS detector are presented. The results are based on the large dataset collected during Run 2 of the LHC at a centre-of-mass energy of 13 TeV. The analyses are optimised for high sensitivity over a large range in resonance mass. Jet substructure techniques are used to identify hadronic decays of highly-boosted W, Z, and H bosons. A statistical combination of these searches provides the most stringent constraints on heavy vector bosons with large couplings to standard model bosons and fermions.

Presenter: MANTILLA SUAREZ, Cristina Ana (Johns Hopkins University (US))

Session Classification: Alternatives to Supersymmetry

Track Classification: Alternatives to Supersymmetry