Contribution ID: **60** Type: **not specified**

Searches for rare Higgs boson production processes with the CMS detector

Wednesday, November 6, 2024 10:20 AM (20 minutes)

The full set of data collected by CMS experiment at a centre of mass energy of 13 TeV allows searches for rare production modes of the Higgs boson, subdominant with respect the ones already observed at the LHC, by using a variety of decay modes profiting of the ones with largest expected branching fractions. They include associate production of the Higgs with two b-quarks, with a c-quark, or vector boson scattering production with two associated Ws. While the expected rate is still limited with the collected data, these modes become enhanced in several BSM theories and can be used to constrain such models.

Primary track

Precision Higgs measurements and calculations

Is the speaker a PhD student or post-doc?

No

Presenter: Mr BEVILACQUA, Tiziano (University of Zürich (CH))

Session Classification: Precision Higgs measurements and calculations 3 - sal IV

Track Classification: BSM Higgs physics