Contribution ID: **178** Type: **Parallel Talk**

Search for new resonances coupling to third generation quarks at CMS

Thursday, 7 July 2022 16:15 (15 minutes)

We present an overview of searches for new physics with top and bottom quarks in the final state, using proton-proton collision data collected with the CMS detector at the CERN LHC at a center-of-mass energy of 13 TeV. The results cover non-SUSY based extensions of the SM, including heavy gauge bosons or excited third generation quarks. Decay channels to vector-like top partner quarks, such as T', are also considered. We explore the use of jet substructure techniques to reconstruct highly boosted objects in events, enhancing the sensitivity of these searches.

In-person participation

Yes

Primary author: DE LEO, Ksenia

Co-author: MEYER, Arnd

Presenter: DE LEO, Ksenia

Session Classification: Beyond the Standard Model

Track Classification: Beyond the Standard Model