Abstract Submitted
for the APR18 Meeting of
The American Physical Society

Search for resonant pair production of Higgs bosons in the four bottom quark final state in proton-proton collisions at $\sqrt{s}$ = 13 TeV DANIEL GUERRERO, Univ of Florida - Gainesville, CMS COLLABORATION — A model-independent search for a narrow-width resonance produced in proton-proton collisions at a center-of-mass energy of 13 TeV and decaying to a pair of Higgs bosons that in turn each decay to a bottom quark-antiquark pair, is presented. This analysis is performed using data recorded by the CMS experiment at the LHC in 2016, corresponding to an integrated luminosity of 35.9 inverse femtobarns. No significant excess with respect to the standard model expectation is observed. Upper limits at a 95% confidence level on the production cross section for such a resonance, in the mass range from 260 to 1200 GeV, are reported.

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Date submitted: 09 Jan 2018 Electronic form version 1.4