

## Phenomenology 2023 Symposium



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## Non-resonant di-Higgs searches in four b final state at CMS

*Tuesday 9 May 2023 18:00 (15 minutes)*

In this talk, we will discuss about the results of searches for Higgs pair production in the four-bottom-quark final state via gluon fusion (ggF), vector boson fusion (VBF) and the one associated with an additional vector boson (VHH) with the CMS detector. In addition to the analysis strategy and limits on the production cross section of this process, constraints on the Higgs boson self-coupling and the coupling between two Higgs bosons and two vector bosons will be presented.

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**Session Classification:** Higgs I