

Search for Higgs boson pair production in the $b\bar{b}\tau\tau$ decay channel using 13 TeV pp collision data from the ATLAS detector

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A search for non-resonant and resonant Higgs boson pair production in $b\bar{b}\tau\tau$ final states is conducted using p-p collision data with an integrated luminosity of 139 fb^{-1} collected at $s=\sqrt{13} \text{ TeV}$ by the ATLAS detector at the LHC. Events with at least one τ -lepton decaying hadronically are considered. Multivariate analysis techniques are used to extract the signals. The talk will show an overview of the physics motivation, the analysis methodology as well as the preliminary results.

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