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Search for CP-odd $t\bar{t}H$ production in the $H \rightarrow b\bar{b}$ decay channel with ATLAS

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Following the observation of associated production of a Higgs boson with a pair of top-anti-top quarks ($t\bar{t}H$), it is now essential to explore the detailed properties of the Higgs-Top coupling to test the predictions of the Standard Model of Particle Physics and search for clues of new physics that can modify this interaction. This talk describes the search to constrain odd charge-parity (CP) components in the $t\bar{t}H$ coupling through $t\bar{t}H$ production in the $H \rightarrow b\bar{b}$ decay channel, using 139 fb of pp collision data collected with the ATLAS detector at a center of mass energy of 13 TeV.

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