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## Search for $t\bar{t}H$ production with Higgs decays to $b$ quarks at the ATLAS detector

Searching for the production of Higgs boson in association with a pair of top quarks would allow a direct measurement of the top quark Yukawa coupling and will provide an important test of the Higgs mechanism within the Standard Model. A search for this process is presented using proton proton collisions at  $\sqrt{s} = 13$  TeV, collected by the ATLAS detector in both 2015 and 2016. Higgs boson decaying to two  $b$  quarks, and top pair decaying in semileptonic or dileptonic are considered.

### Summary

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