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Search for the Higgs boson production in association with top quarks at $\sqrt{s} = 13$ TeV with the ATLAS detector

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The observation of the Higgs boson production in association with top quarks (ttH) is of particular importance, as it will be a direct evidence of the top Higgs Yukawa coupling. Further measurements of this process may be sensitive to potential new physics beyond the Standard Model, due to the large value of the top Yukawa coupling. I present searches for this production mode using ATLAS data taken in 2015 and 2016 at a center-of-mass energy of 13 TeV, with a focus on the analyses of diphoton and $b\bar{b}$ final states.

Primary author: WANG, HAICHEN (Lawrence Berkeley National Laboratory)

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