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Search for $W' \rightarrow tb$ decays in the hadronic final state with the ATLAS detector

A search for W' production with decay to a top quark and a bottom quark in proton-proton collisions at $\sqrt{s}=13$ TeV with the ATLAS detector is presented. The hadronic decay of the top quark is identified using DNN-based boosted-object techniques. The dominant background is obtained by a data-driven method with small systematic uncertainties. The results are presented as upper limits on the W' production cross-section times the top-bottom channel branching ratio for several W' masses ranging from 1.5 to 6 TeV.

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Collaboration / Activity

ATLAS

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