

Testing the Standard Model using boosted top quark production with the ATLAS experiment at the LHC

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Measurements in boosted top quark production test the Standard Model in a previously unexplored regime with a strongly enhanced sensitivity to high-scale new phenomena. Dedicated techniques have been developed to reconstruct and identify boosted top quarks. In this contribution measurements of the ATLAS experiment are presented of the differential cross section and asymmetries in this extreme kinematic regime. The measurements are interpreted within the Standard Model Effective Field Theory, yielding stringent bounds on the Wilson coefficients of two-light-quark-two-quark operators.

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