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# Top quark properties measurements with the ATLAS detector

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Precise measurements of the properties of the top quark test the Standard Model (SM) and can be used to constrain new physics models. As it may be significantly enhanced by the presence of new physics, the  $t\bar{t}$  production charge asymmetry is measured inclusively and differentially using the 8 TeV ATLAS dataset using both the lepton+jets and dilepton channels, including a dedicated measurement for highly boosted top-quarks. In the SM the top-quark is predicted to decay almost exclusively into a W boson and a b-quark. Measurements of the W-helicity and spin correlations in  $t\bar{t}$  production are presented as well as new measurements of CP asymmetries in b-hadron decays using top-quark events.

## Experimental Collaboration

ATLAS

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