

Abstract Submitted
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Measurement of the W Boson Helicity in Top Quark Decay at D0

AMITABHA DAS, University of Arizona, D0 COLLABORATION — We report on a model-independent measurement of the helicity of W bosons produced in top quark decays based on a 1 fb^{-1} sample of $t\bar{t}$ events in the dilepton and lepton+jets channels. In the standard model, the fraction of longitudinal (right-handed) W bosons is predicted to be 0.7 (0). The deviation from these values would be a clear sign of new physics. The measurement is based upon the angle between the momenta of the down-type fermion and the top quark in the W boson rest frame.

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