Abstract Submitted for the APR12 Meeting of The American Physical Society

W Helicity measurement in top quark events with D0 AMITABHA DAS, Southern Methodist University, D0 COLLABORATION — We report on a model-independent measurement of the helicity of W bosons produced in top quark decays based on a 5.4/fb sample of top quark pair events, collected by the D0 detector at Fermilab, colliding protons and anti-protons at the center of mass energy of 1.96 TeV, 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.

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Date submitted: 06 Jan 2012

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