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Measurement of the W Boson Helicity in Top Quark Decay at DØ BRYAN GMYREK, University of Arizona, DZERO COLLABORATION — We report on a measurement of the fraction of right-handed W bosons in top quark decay. In the standard model, this fraction is too small to measure with the current data sample, so a nonzero value would be a clear sign of new physics. The measurement uses $t\bar{t}$ events in both the lepton+jets and dilepton decay channels, and is based upon the helicity angle θ^* between the charged lepton and top quark directions in the W boson rest frame.

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