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Measurement of top pair spin correlation using CDF Run II lepton+jets data DAVID MIETLICKI, University of Michigan, CDF COLLABORATION — Top quark spin is one of the most interesting, yet not well-measured, quantities in top physics. Standard model top pair production through qq annihilation or gluon fusion produces a characteristic spin correlation which can be modified by exotic production mechanisms such as Z' bosons or KK gluons. According to the standard model, top quarks decay weakly before any hadronization processes take effect. This enables top quark spin information to be transmitted to the top quark decay products. We report on the observation and measurement of the t-tbar spin correlation using lepton+jet events in 4.5/fb of CDF data.

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