

Abstract Submitted
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Measurement of the Top Quark Transverse Momentum Spectrum at DØ JIRI KVITA, Institute of Physics of Czech Academy of Sciences, Czech Republic, DZERO COLLABORATION — We present a measurement of the transverse momentum spectrum of top quarks produced in pairs ($t\bar{t}$) in $p\bar{p}$ collisions. This spectrum is sensitive to potential contributions from non-standard $t\bar{t}$ production mechanisms. Within the Standard Model the top quark decays into a W boson and a b almost 100% of the time. In this analysis we consider $t\bar{t}$ candidates selected in the lepton+jets final state, from data collected by the DØ experiment during Run II of the Fermilab Tevatron collider. To optimize the resolution of the transverse momentum measurement, we perform a constrained kinematic fit to the $t\bar{t}$ hypothesis, making use of b-tagging to further reduce the combinatorial background.

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