

Abstract Submitted
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A measurement of top quark pair differential cross-section $d\sigma/dm_{t\bar{t}}$ in the dilepton channel¹ KI LIE², STEVEN ERREDE³, IRENE VICHOU⁴, University of Illinois at Urbana-Champaign, ATLAS COLLABORATION — This analysis presents a study of the measurement of the differential cross section as a function of invariant mass of the top quark pairs using 7TeV 2011 data recorded by the ATLAS detector at the Large Hadron Collider. Events of top-antitop pairs are selected in the di-lepton channel. The reconstructed differential distribution is subtracted with estimated backgrounds and is unfolded to correct for detector response and acceptance using the SVD algorithm. Tests on unfolding with MC simulated data are performed. Effects of the main sources of systematic uncertainties on the differential distribution are estimated.

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