

Abstract Submitted
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Measurement of the top quark pair production cross section in pp collisions at 7 TeV center of mass energy using secondary vertex b-tagging IOANA ANGHEL, U of Illinois at Chicago, CMS COLLABORATION — We present a measurement of top quark pair production cross section using 36 pb^{-1} of data collected by the CMS detector in pp collisions at a center-of-mass energy of 7 TeV. We select events containing one isolated muon, high missing transverse energy and at least three energetic jets. After using a data driven method to estimate the amount of QCD in our preselected data, further separation of the signal from the W boson background was attained through the identification of the b -jets in the events by reconstructing secondary vertices. The cross section is extracted from the excess of tagged events with at least three jets over the background prediction.

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