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Measurement of the Top Quark Pair Production Cross Section using Muon+jets Data at CDF DAVID TO, Angelo State University, RACHEL BERNICK, Cornell University, WESLEY KETCHUM, YOUNG-KEE KIM, University of Chicago — We have measured a cross section of the top quark pair production from the data at CDF collected of many years. The cross section was determined by using a data sample with an integrated luminosity of 6.6 $\pm$ .396 fb^{-1}. We try to reconstruct top pair events by analyzing decays of leptons+jets in particular we look for $\mu\upsilon$+jets. The sample had 7975 total events; we were able to provide the right cuts to give us 25 $\pm$ 5 top pair production events with a background of 6.19 $\pm$ 3.039 We were able to find the cross section for top pair production to be σ = 7.748 $\pm$ 2.07 pb using an acceptance of A=0.003677.

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