Abstract Submitted
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Measurement of the single top associated production cross section with ATLAS PENG GE, School of Physics, Shandong University, Jinan, P.R.China, REINHARD SCHWIENHORST, HUAQIAO ZHANG, Department of Physics and Astronomy, Michigan State University, East Lansing, MI, USA, ATLAS COLLABORATION — The production cross section of a W boson associated with a single top-quark is measured with the ATLAS detector in pp collisions at the LHC. Events containing at least one central high pt jet and two oppositely-charged leptons are selected. To separate the Wt signal from the large backgrounds, a boosted decision trees method is employed that combines several discriminant variables into one classifier. A template fit to the classifier output distribution is used to measure the signal cross section. The CKM matrix element Vtb is also determined from this measurement.

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