

Abstract Submitted
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Single-Top Quark Search Results with Early ATLAS Data JENNY
HOLZBAUER, ATLAS COLLABORATION — We present the first studies using
ATLAS data to investigate the single-top quark t-channel production at the LHC.
The data were collected from proton-proton collisions occurring at 7 TeV center-of-
mass energy. Selections based on the kinematical signature of the single-top quark
process in simulated events are used to isolate the signal while removing background
events in data. To distinguish this process from others such as the $t\bar{t}$ process, W +jets
and QCD, we require an energetic final state including two jets, one of which must
be tagged as a b-jet, one lepton, and missing energy. We report the results of this
preliminary study and discuss the implications for future analyses.

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