

Abstract Submitted  
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**Search for a heavy gauge boson  $W'$  in the final state with an electron and large missing transverse energy in  $pp$  collisions at  $\sqrt{s} = 7$  TeV**  
DARREN PUIGH, Cornell University, CMS COLLABORATION — A search for a heavy gauge boson  $W'$  has been conducted by the CMS experiment at the LHC in the decay channel with an electron and large transverse energy imbalance, using proton-proton collision data corresponding to an integrated luminosity of  $36 \text{ pb}^{-1}$ . No excess above standard model expectations is seen in the transverse mass distribution of the electron-(missing  $E_T$ ) system. Assuming standard-model-like couplings and decay branching fractions, a  $W'$  boson with a mass less than  $1.36 \text{ TeV}/c^2$  is excluded at 95% confidence level.

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