

Abstract Submitted  
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**Search for Z decays into an electron and muon at CMS** NICHOLAS MUCIA, Northwestern Univ, CMS COLLABORATION — We present the search for a Z boson decaying into an electron and a muon. This process is highly suppressed in the Standard Model and thus any observation would be strong evidence for new physics. This analysis uses  $19.7fb^{-1}$  of 8 TeV data taken at CMS in 2012. We normalize the events using  $Z \rightarrow \mu\mu$  and  $Z \rightarrow ee$  events which decreases systematic uncertainties and increases our sensitivity. The expected bounds of this decay are more sensitive than the current best limits.

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