

Abstract Submitted  
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**Signatures of Standard Model Dimuon Sources in the CMS Detector** PRAMOD LAMICHHANE, PAUL KARCHIN, Wayne State University, LEONARD SPIEGEL, FermiLab, CAROLINE MILSTENE, SOWJANYA GOL-LAPINNI, CHAMATH KOTTACHCHI, MARK MATTSON, Wayne State University — The response of the CMS detector for standard model sources of pairs of oppositely charged muons is studied using a detailed simulation based on GEANT4. The response is affected by the real-time trigger, geometrical acceptance, reconstruction efficiency, and resolution on invariant mass. The simulated response is compared to the measured distribution of invariant mass using a data sample corresponding to 5 fb-1 of p-p collisions at  $\sqrt{s}= 7$  TeV.

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