

Abstract Submitted  
for the APR16 Meeting of  
The American Physical Society

**Search for long-lived particles decaying to an electron and a muon that have large transverse impact parameters.** BINGXUAN LIU, Ohio State Univ - Columbus, CMS COLLABORATION — A search for long-lived particles decaying to leptons using proton-proton collisions produced by the LHC is described. The talk will cover both the search published using data collected by the CMS detector at  $\sqrt{s} = 8$  TeV, with an integrated luminosity of 19.7 inverse femtobarns, and the ongoing search using data collected by the CMS detector at  $\sqrt{s} = 13$  TeV in 2015, with an integrated luminosity of 2.5 inverse femtobarns. Both the published search and the ongoing search are selecting events with an electron and a muon that have large transverse impact parameters. The search is sensitive to a wide range of models with non prompt e-mu final states.

Bingxuan Liu  
Ohio State Univ - Columbus

Date submitted: 06 Jan 2016

Electronic form version 1.4