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Search for long-lived particles decaying into two muons in protonproton collisions at sqrt(s)=13TeV using the CMS scouting data sets HARDIK ROUTRAY, Rutgers University, New Brunswick, CMS COLLABORA-TION — A search for displaced dimuon resonances is performed using proton-proton collisions at a center-of-mass energy of 13 TeV, collected by the CMS experiment at the LHC in 20172018, corresponding to an integrated luminosity of 101.3 inv. fb. The data sets used in this search were collected using a dedicated dimuon scouting trigger stream, in order to explore otherwise inaccessible phase space at low dimuon mass (down to 0.21 GeV) and non-zero displacement (0-11cm) from the interaction point. Constraints are set on two models of physics beyond the Standard Model: one model where a Higgs boson decays into a pair of long-lived dark photons, and the other model where a B hadron decays via a long-lived scalar particle. A number of mass and lifetime hypotheses are considered for the involved long-lived particles, and one long-lived particle is required to decay into a pair of muons. Model-independent constraints are also set.

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