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Search for collimated muon pairs (lepton jets) in the CMS experiment at LHC AYSEN TATARINOV, TAMU, CMS COLLABORATION — We present an inclusive, signature-based search for groups of collimated muon pairs also known as lepton jets, arising from spectroscopic cascades in a hidden sector accessible only through high-energy collisions, using the CMS detector. In several signatures defined by number of muon pairs per collimated group and number of groups per event, we search for the lightest on-shell state in the hidden spectrum with a mass-peak fit and interpret the results using two representative benchmark models: SUSY dark matter with a $U(1)_{\rm dark}$ and NMSSM Higgs escaping LEP limits via Higgs-to-Higgs decays.

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