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Testing Lepton Flavor Universality With High Mass Dilepton Events Using the CMS Run 2 Dataset MINXI YANG, Purdue University, CMS COLLABORATION COLLABORATION — Searches for new physics beyond standard model in high-mass dilepton final states is an important part of the CMS physics program. Recently, hints of lepton flavor universality (LFU) violation were observed in the measurements of the branching fractions of B meson decays to Kaons and dilepton pairs. This created interest in performing complementary studies in high-mass dilepton events. In our analysis, LFU is tested by calculating the dimuon to dielectron invariant mass ratio at high dilepton invariant mass with 137 fb-1 of data at sqrt(s) = 13 TeV. The ratio is corrected for the difference in acceptance and efficiency of two muons and electrons and are unfolded to particle level. This is the first direct measurement of this flavor ratio at the LHC. The result is in agreement with the expectation from the SM.

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