## Abstract Submitted for the APR20 Meeting of The American Physical Society

Search for CP violating anomalous top quark coupling in pp collisions at sqrt(s) = 13 TeV with CMS detector. SEUNGKYU HA, SUYONG CHOI, Korea University, SEHWOOK LEE, Kyungpook National University, JAE-HOON LIM, Korea University, HWIDONG YOO, Yonsei University, CMS COL-LABORATION — CP violation is studied in top quark pair production decaying into the dilepton channel(ee,mumu, and emu), collected by the CMS experiment at a centre-of-mass energy of 13 TeV corresponding to an integrated luminosity of 35.9 fb<sup>-</sup>1. In this search two observables are probed, O1 and O3, which are the Levi-Civita tensors of the four-momenta of charged leptons, b quark jets, and top quarks. Asymmetries are obtained by these observables. The chromoelectric dipole moment (CEDM) of the top quark is extracted from the measured asymmetries and their uncertainties. Combination of three channels for the CEDM is also presented.

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