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Search for Z' resonances decaying to top-antitop in dilepton+jets final states in pp collisions at 8 TeV center of mass energy JIMIN GEORGE, IA IASHVILI, SUPRIYA JAIN, SUNY-Buffalo, CMS COLLABORATION — We present a model-independent search for heavy resonances decaying to top-antitop pairs using 19.7/fb of data recorded by the CMS detector in pp collisions at 8 TeV center of mass energy. The search is based on events containing two leptons (electron or muon) and at least two jets. No deviation is observed over the expected rate from the standard model processes. We, therefore, set 95% confidence-level upper limits on the production cross section for the heavy resonances decaying to top-antitop in the mass range of 1-3 TeV. Upper mass limits are set for the narrow and wide width leptophobic top color Z', as well as for the Kaluza-Klein excitation of gluons as predicted in theories beyond the standard model.

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