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Search for New Physics in the DiElectron Channel at CDF SAM HARPER, Oxford University, CDF COLLABORATION — We present a measurement of the Drell-Yan mass spectrum at high energies in the electron channel using approximately 400 pb^{-1} of proton-antiproton collision data taken with the CDF detector at a centre of mass energy of 1.96 TeV. We interpret this mass spectrum to provide limits on the production rates of new neutral massive particles decaying to two electrons. Examples of such particles include Z' bosons resulting from various new physics models and the Randal-Sundrum Gravitons.

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