

Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Search for Randall-Sundrum Gravitons in Dilepton and Diphoton Final States with 1 fb^{-1} of data AMITABHA DAS, ULRICH HEINTZ, Boston University, D0 COLLABORATION — We will report the result from a search for Randall-Sundrum gravitons decaying to dielectron and diphoton final states in 1 fb^{-1} of data collected by the D0 detector at Fermilab. The standard model has given us an excellent description of particle physics at energies that have been probed experimentally. Yet, it leaves many questions unanswered and we know that at higher energy it must fail. There are many theoretical ideas that address the shortcomings of the standard model. The Randall-Sundrum model is one of them, which is based on the idea of gravity propagating in extra dimensions. In this analysis, we do not find any excess over standard model expectations and set a lower limit on the mass of such gravitons.

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Date submitted: 10 Jan 2007

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