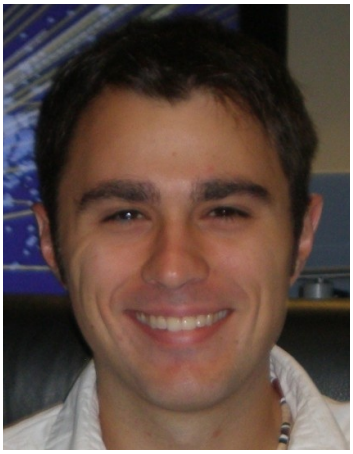
LEPP Journal Club

Friday, March 2, 2012. 4:00 pm (3:45 refreshments)
301 Physical Sciences Building



Ronald Remington
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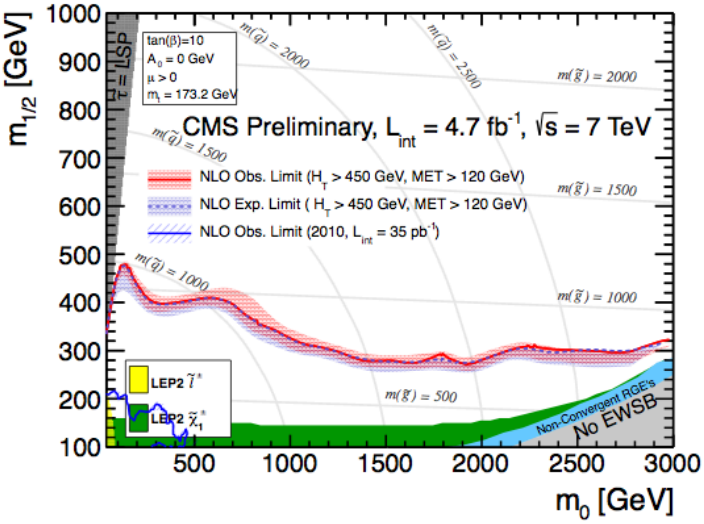
Search for New Physics with Same-Sign Dileptons, Jets, & Missing Energy using CMS



Several models of new physics can be probed at the LHC by studying the unique event topology consisting of jets, missing energy, & pairs of isolated same-sign leptons. The production of same-sign dileptons is heavily suppressed in the Standard Model, allowing one to aggressively explore new physics models, in particular SUSY, in an environment with minimal backgrounds. Here we will describe the design, results, and implications of the latest multifaceted search for excesses of same-sign di-lepton production using 4.7 fb^{-1} of data recorded by the CMS Detector.

LEPP, the Cornell University Laboratory for Elementary-Particle Physics, has joined with CHESS to become the Cornell Laboratory for Accelerator-based Sciences and Education (CLASSE). LEPP's primary source of support is the National Science Foundation.