Note Special Day!

LEPP Journal Club

Wednesday, February 1, 2012. 4:00 pm (3:45 refreshments) 301 Physical Sciences Building



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CMS Supersymmetry Searches: Yesterday & Tomorrow

In only two years time, the LHC experiments carried out a plethora of searches, placing stringent limits on the existence of new physics beyond the Standard Model at the TeV scale.

Starting from an example of an inclusive search for a dark-matter candidate with the CMS detector, I discuss how the

Jet pT: 393 GeV

Jet pT: 57 GeV

Jet pT: 34 GeV

CMS Experiment at LHC, CERN

Run/Event: 148953 / 70626194

Data recorded: Tue Oct 26 07:13:54 2010 CEST

implications of the current results for theories like supersymmetry lead to an evolution of the search strategies. With even more LHC data expected shortly, rare production modes, and the naturalness itself of supersymmetric models, will be put to the test.



