BSM and the early LHC

Rapport sur les contributions

https://indico.in2p3.fr/e/4228

ID de Contribution: **0** Type: **Non spécifié**

Heavy quarks at Tevatron/LHC

lundi 13 décembre 2010 11:00 (1 heure)

Exotic quarks appear in several extensions of the Standard Model. Those have been searched in recent Tevatron data and will also be testable using first year LHC resuts. I will discuss in particular how one could distinguish between a heavy quark being a fourth generation against a custodian arising in warped extra-dimensional models.

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ID de Contribution: **1** Type: **Non spécifié**

ATLAS Searches for Extra Gauge Bosons and for SUSY in the Early LHC Data

jeudi 16 décembre 2010 11:00 (1 heure)

TBA

Author: MUANZA, Steve (Centre de Physique des Particules de Marseille (CPPM))

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ID de Contribution: **2** Type: **Non spécifié**

Leptonic signatures of doubly charged Higgs bosons at hadron colliders

mardi 14 décembre 2010 15:00 (1 heure)

TBA

Author: GAUR, Naveen (Delhi University)

Orateur: GAUR, Naveen (Delhi University)

ID de Contribution: **3** Type: **Non spécifié**

Searching for lepton jets at hadron colliders

mercredi 15 décembre 2010 11:00 (1 heure)

A lepton jet is a cluster of highly collimated charged particles: electrons, and possibly muons and pions. Lepton jets can be produced in colliders in a class of theories that contains light (GeV scale, or less) hidden sector particles. I will review the strategies to search for these objects at hadron colliders. I will talk in more detail about one method, proposed in 1007.3496, to discriminate high multiplicity electron jets from QCD jets. The main discriminating variables are the jet electromagnetic fraction and charge ratio. The efficiency for rejection of QCD jets is estimated to be of order 10^−3 per jet.

Author: FALKOWSKI, Adam (Laboratoire de Physique Theorique d'Orsay (LPTh))

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ID de Contribution: **4** Type: **Non spécifié**

Boosted massive jets @ LHC

mercredi 15 décembre 2010 15:00 (1 heure)

I will talk about the emergence of boosted massive jets (such as top or Higgs jets) at the LHC, and the nature of the problem (finite resolution). Then, I will talk about recent development of semi-analytical tools, including jet mass distribution and jet-substructure to understand signal and QCD background. In particular, I will present a new class of infrared safe jet observables, template overlaps, designed to filter targeted highly boosted particle decays from QCD jets and other background. Possible hints for New Physics from Tevatron will be also discussed.

Talk based on:arXiv:1006.2035, arXiv:0810.0934, arXiv:0807.0234, and work in progress.

Author: SEUNG, Lee (Weizmann Institute, Tel Haviv)

Orateur: SEUNG, Lee (Weizmann Institute, Tel Haviv)

ID de Contribution: **5** Type: **Non spécifié**

TBA

TBA

ID de Contribution: **6** Type: **Non spécifié**

Flavor Trivial Warped Extra Dimension

vendredi 17 décembre 2010 11:00 (1 heure)

TBA

Author: DELAUNAY, Cedric (Weizmann Institute)

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ID de Contribution: **7** Type: **Non spécifié**

Slepton mass-splittings as a signal of LFV at the LHC

jeudi 16 décembre 2010 15:00 (1 heure)

TBA

Author: CALIBBI, Lorenzo (Max Planck Institute, Munich)

Orateur: CALIBBI, Lorenzo (Max Planck Institute, Munich)

ID de Contribution: **8** Type: **Non spécifié**

Dark Matter from Lorentz Invariance in 6D: a LHC Friendly Scenario with a Natural LKP

lundi 13 décembre 2010 15:00 (1 heure)

TBA

Author: LLODRA-PEREZ, Jeremie (IPNL)

Orateur: LLODRA-PEREZ, Jeremie (IPNL)

ID de Contribution: **9** Type: **Non spécifié**

TBA

mardi 14 décembre 2010 11:00 (1 heure)

TBA

Author: VERDIER, Patrice (IPNL)

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ID de Contribution: **10** Type: **Non spécifié**

Maximizing the sensitivity in BSM searches and measurements: the matrix element method.

jeudi 16 décembre 2010 09:30 (1 heure)

Orateur: MALTONI, Fabio (UC Luovain)