



**UNIVERSITÉ  
DE GENÈVE**

**FACULTÉ DES SCIENCES**  
Département de physique  
nucléaire et corpusculaire

## **SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE**

**SUJET :** Jet substructure as a tool to reconstruct the decay of heavy boosted objects

**PAR:** Dr Mario CAMPANELLI  
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**DATE:** Mercredi 7 novembre 2012, 11h15

**LIEU:** Science III, Auditoire 1S081  
30, quai Ernest-Ansermet, 1211 Genève 4

### **RÉSUMÉ:**

The LHC is the first collider where particles with mass at the electroweak scale can be produced with momenta much higher than their mass. The decay products of these particles are very boosted, and Hadronic decays would be reconstructed as a single "fat" jet. In the last few years there has been a great wealth of studies in the field of hadronic jet substructure to reconstruct these final states. In this seminar I will review the main phenomenological ideas, as well as the first experimental results using jet substructure as a tool to explore new and old physics.

INFORMATION : <http://dpnc.unige.ch/seminaire/annonce.html>

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