

# SEMPARIS – Séminaires en région parisienne

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## Particle Physics at LPTHE

**Mardi 13 Octobre 2015, 14 :30**

LPTHE, Library

Domaines : hep-ph

Titre : *New physics at the TeV scale : extra Higgses and WIMP Dark Matter*

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Résumé : *The high energy physics community is in the process of deciding which machines to propose for funding. It is then particularly important to study the discovery prospects of different models at such machines. In this talk, I will do so for two motivated cases : i) new physics is almost natural, and an extra singlet-like Higgs is the lightest new particle around (conceivable e.g. in the NMSSM and in Twin Higgs); ii) independently of naturalness, Dark Matter is an electroweak multiplet, the prototype of a WIMP. I will mainly focus on the reach of various colliders in the first case, and of telescopes in the second one.*

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