

# SEMPARIS – Séminaires en région parisienne

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## Séminaire de physique des particules et de cosmologie

**Mardi 12 Décembre 2017, 16 :00**  
IPHT, Salle Claude Itzykson, Bât. 774  
Domaines : hep-ph

Titre : *Exploring improvements to the fitting of the strong coupling constant through means of jet substructure techniques*

Orateur : **Vincent Theeuwes ( University at Buffalo )**

Résumé : *Over the years many different types of fits for the strong coupling constant have been performed. However one high precision result that currently significantly differs from the world average are results from event shapes at electron positron colliders. One possible source for the difference in these results could be the degeneracy between the fit of the strong coupling constant and non-perturbative parameter. In this talk I will explore the possibility to apply jet substructure techniques, specifically soft drop, in order to break the degeneracy between the non-perturbative parameter and the strong coupling constant.*

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