



## *Séminaire du Laboratoire de l'Accélérateur Linéaire*

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**Vendredi 30 Janvier 2015 à 11 :00**

## **Precision determination of the top-quark mass**

The top-quark mass is a fundamental parameter of the Standard Model. We will motivate, why precision determinations of the top-quark mass are important in the upcoming high-energy run of the LHC and discuss the prerequisites in theory for the extraction of a well-defined mass parameter in a given renormalization scheme. We show that the top-quark's running mass in the  $\overline{\text{MS}}$  scheme can be extracted with good precision at next-to-next-to-leading order in QCD and comment on methods to measure the top-quark mass parameter from comparison to events with top-quark decay products.

**Auditorium Pierre Lehmann du LAL - Bât. 200, Orsay**

Thé et café seront servis 1/4h avant le séminaire



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