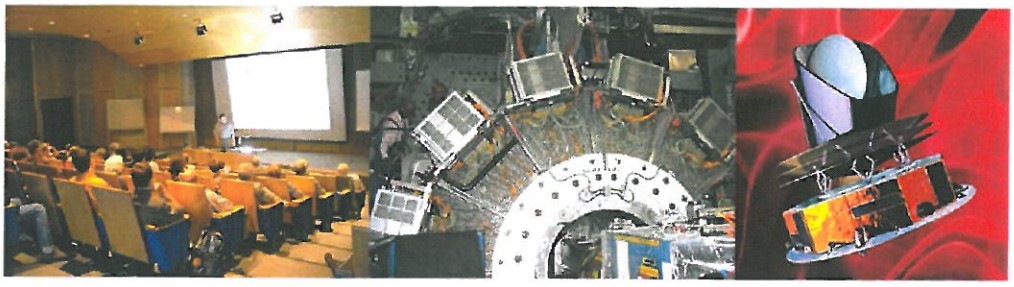
LABORATOIRE DE L'ACCÉLÉRATEUR LINÉAIRE



Séminaire du Laboratoire de l'Accélérateur Linéaire

Manqi Ruan

LLR Palaiseau

Mardi 14 Fevrier 2012 à 11 :00

Arbor and Shower Fractal Dimension : Advanced reconstruction Methodology at high granular calorimeter for the Linear collider

The concept of "particle flow" has been developed to optimise jet energy resolution by best separating the different components of hadronic jets. A highly granular calorimetry is mandatory and provides an unprecedented level of detail in the reconstruction of showers. This enables new approaches to shower analysis, here the measurement and use of shower fractal dimension and an calorimeter track reconstruction algorithm Arbor is described. The fractal dimension is a characteristic number that measures the global density of the shower. This property is highly dependent on the type of interaction and the particle energy. Its application in identifying particles and estimating their energy is described.

Salle 101 du LAL - Bât. 200, Orsay

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

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