



Séminaire du Laboratoire de l'Accélérateur Linéaire

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Jour inhabituel

Lundi 15 Septembre 2008 à 11 :00

**Liquid Argon Time Projection Chambers :
U.S R&D and the MicroBooNE Experiment**

Liquid Argon Time Projection Chamber (LAr TPC) detectors are ideally suited for studying neutrino interactions and probing the parameters that characterize neutrino oscillations. The ability to drift ionization particles over long distances in purified argon and to collect abundant scintillation light allows for excellent particle identification and triggering capability. Recent U.S based work in the development of LAr TPC technology will be presented in this talk, including details of the MicroBooNE experiment, which is a 175 ton LAr TPC which will be exposed to Fermilab's Booster neutrino beamline starting in 2011. MicroBooNE combines a timely physics program with the hardware R&D necessary for the evolution of LAr TPCs into massive (~50 kiloTon) detectors necessary to complete our understanding of neutrino interactions.

Salle 101 du LAL - Bât. 200, Orsay

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