



**UNIVERSITÉ
DE GENÈVE**

FACULTÉ DES SCIENCES
Département de physique
nucléaire et corpusculaire

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

- SUJET:** **Hunting for sterile neutrinos: short baseline neutrinos at FERMILAB**
- PAR:** **Prof. Antonio Ereditato**
 Bern University
- DATE:** Mercredi 19 mars 2014, 11h15
- LIEU:** Science III, Auditoire 1S081
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RÉSUMÉ:

The "anomaly" constituted by the LSND/MiniBooNE neutrino signal is still there after many years. This points to the possible existence of sterile neutrinos.

An extensive short-mid term program aimed at solving the "puzzle" is being conducted at Fermilab in the Booster neutrino beam, centered on the use of new detectors based on the liquid Argon TPC technology. A multi-step strategy envisions at first the use of the MicroBooNE apparatus, being commissioned in the next months. In a second phase, MicroBooNE will be possibly complemented by the LAr1-ND near detector, being proposed to the Fermilab scientific committee.

This program and its prospects will be presented, as well as the parallel work being conducted on LAr TPCs by the MicroBooNE/LAr1-ND Bern group.

INFORMATION : <http://dpnc.unige.ch/seminaire/annonce.html>

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