

**CENTRE D'ETUDES NUCLÉAIRES DE
BORDEAUX-GRADIGNAN**

Vendredi 16 Février 2018

à 11H

Un café sera servi à partir de 10h45

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**Neutrino Oscillation
and other Quantum Oscillations**

The neutrino oscillation is the only firm phenomenon that can not be explained by the standard model of elementary particle physics. It is expected that we can deepen our understanding of the physics by studying the neutrino oscillations. In these years, the last neutrino mixing angle θ_{13} and the $\nu_{\mu} \rightarrow \nu_e$ appearance oscillation have been measured and clues of leptonic CP violation are being investigated.

The next important subjects are to firmly measure the leptonic CP violation and the 1-3 mass ordering. In the former part of this seminar, current status of the neutrino oscillation experiments and future prospects are presented. The latter part of this seminar is for educational purpose. Not only the neutrino oscillation, many kinds of oscillations take place in various physics phenomena; most of them bear important physics. Such important physics can be understood as the same way as the neutrino oscillation.

Examples of such quantum oscillations are explained relating to the neutrino oscillation mechanism.

Salle des Séminaires du CENBG

Le Haut Vigneau - BP 120 - F-33175 Gradignan Cedex