

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

Vendredi 9 Juin 2017

à 11H

Un café sera servi à partir de 10h45

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**Shell model states in the continuum:
tetraneutron resonance**

Theoretical studies and experimental searches for a bound or resonant state in a system of four neutrons (tetraneutron) were started more than 50 years ago.

The first experimental observation of the tetraneutron resonance was reported in 2016. I shall discuss the theoretical description of the low-energy tetraneutron resonance consistent with the experiment which however has poor statistics and hence large error bars.

This description is based on ab initio calculations within the no-core shell model extended to the description of four-body continuum within the democratic decay approximation.

Salle des Séminaires du CENBG

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