

# CENTRE D'ÉTUDES NUCLÉAIRES DE BORDEAUX-GRADIGNAN

**Mardi 28 Janvier 2014**

**à**

**14H00**

*Un café sera servi à partir de 13h45*

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## **Isospin mixing in the beta delayed proton nuclei $A \sim 50$ , first results**

In the last decade, nuclear fragmentation reactions have produced an important quantity of proton-rich nuclei which are considered as new systems to study the proton-neutron interaction comparatively to stable nuclei and to serve as testing grounds for generalization of theoretical models.

The delayed protons emitted from the isobaric analog state (IAS) populated by the decay of the proton-rich nuclei represent a signature of the isospin-symmetry breaking mainly due to the isospin mixing in the IAS. The magnitude of the isospin mixing in nuclear states is an important term in the test of the Standard Model of the weak interaction.

Recently, a new way has been proposed by the CENBG group to extract the mixing isospin degree from experimental data of the IAS proton strengths decay and from gamma strength shell model calculations. In this talk, I will present the first results of the isospin mixing in the  $A \sim 50$  mass-region obtained using the data measurements of SISSI/LISE3 facility at GANIL.

**Salle des Séminaires du CENBG**

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