

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

Vendredi 9 Février 2018

à 11H

Un café sera servi à partir de 10h45

Diego RAMOS

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Transfer and fusion-induced fission in inverse kinematics. The access to new observables

Transfer- and fusion-induced fission in inverse kinematics was proven to be a powerful tool to investigate nuclear fission, widening the information of the fission fragments and the access to unstable fissioning systems. An experimental campaign for fission investigation has been carried out at GANIL with this technique since 2008. In these experiments, a beam of ^{238}U , accelerated to 6.1 MeV/u, impinges on a ^{12}C target. Fissioning systems from U to Cf are populated through transfer and fusion reactions, with excitation energies that range from few MeV up to 46 MeV. The use of inverse kinematics, the SPIDER telescope, and the VAMOS spectrometer permitted the characterization of the fissioning system in terms of mass, nuclear charge, and excitation energy, and the isotopic identification of the full fragment distribution. This seminar will present this new experimental approach, its advantages with respect to other techniques, and recent results concerning the interplay between proton and neutron content within the fission process.

Salle des Séminaires du CENBG

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