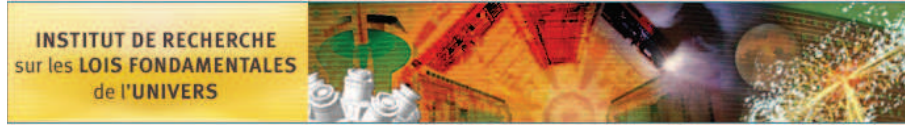


# Service de Physique Nucléaire



## Séminaire

le vendredi 4 septembre 2015 à 11h

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

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### Nuclear Reaction Measurements for Explosive Nuclear Astrophysics

Phil Woods

University of Edinburgh

Nuclear reactions between proton-rich radioactive nuclei, and protons and alpha particles, are critical for interpreting astrophysical observables associated with explosive scenarios such as Novae, Supernovae, and X-ray Bursts. In most cases it is not possible to measure these reactions directly and an indirect approach is mandated. The talk will explore new approaches using transfer reaction studies with radioactive beams in inverse kinematics and the use of heavy ion storage rings. The talk will also explore how measurements relating to the key  $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$  reaction, thought to be triggered in X-ray bursts, might be taken forward in the future.

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*Le café sera servi 10 minutes avant*

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