## Service de Physique Nucléaire



## Séminaire

le vendredi 21 mars 2014 à 11h

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

## The evolution of signatures of quasifission in reactions forming Curium

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Fusion is a delicate process, particularly when production of the heaviest elements is the aim. Quasifission – a fission-like reaction outcome that takes place over incredibly short  $(<10^{-20} \text{ s})$  timescales – is one of the most important competitors with fusion in reactions forming heavy (and superheavy) nuclei. In this presentation, I will demonstrate how to take a 'snapshot' of quasifission processes that occur over zeptoseconds, show how quasifission probabilities and timescales relate to the selected reaction parameters, and provide experimental evidence of quasifission for reactions leading to isotopes of Curium using the Australian National University's large solid-angle CUBE detector array and 14UD heavy ion accelerator.