Physics opportunities with the SPIRAL upgrade



ID de Contribution: 1

Type: Oral contribution

Role of nuclear structure in fission around neutron-deficient Pt

mardi 9 février 2016 14:30 (20 minutes)

The expected production of heavy ions after the Spiral1 upgrade opens a small window for the study of new fission modes recently found in 180Hg [PRL 105, 252502 (2010)]. These reveal a new role for structure effects, not observed in fission of actinides.

The competition between the Coulomb barrier and the foreseen energies of the new beams would allow the study of fusion-fission around neutron-deficient Pt, just two protons away from Hg. From an experimental point of view, observables such as the neutron-proton partition of the fission fragments are a useful tool to tag the presence and influence of structure effects. These observables can be obtained with the use of the spectrometer VAMOS, providing a complete characterisation of the fission fragments and the scission point.

Auteur principal: Dr CAAMAÑO, Manuel (Universidade de Santiago de Compostela)

Orateur: Dr CAAMAÑO, Manuel (Universidade de Santiago de Compostela)

Classification de Session: ACTAR TPC, nuclear structure and reactions with accelerated beams