

Study of spin-orbit interaction and nuclear forces at the drip line

lundi 8 octobre 2012 16:50 (40 minutes)

The present talk will present recent experimental studies aiming at studying the spin-orbit interaction and the evolution of the proton-neutron force when approaching the drip-line. For the former subject, we propose to use the bubble nucleus ^{34}Si to probe the two-body spin orbit interaction. This study can be also used to test the validity of mean field approaches which predict a density and isospin dependence of the spin-orbit interaction. In the second subject, the study of the near drip-line nucleus ^{26}F will be presented. It aims at studying how proton-neutron interactions are changing when a large proton to neutron binding energy asymmetry is found. Experimental results obtained at GANIL will be presented, together with tentative interpretations and consequences.

Auteur principal: Dr OLIVIER, sorlin (GANIL)

Orateur: Dr OLIVIER, sorlin (GANIL)

Classification de Session: Shell evolution of neutron rich nuclei I

Classification de thématique: Shell evolution in the neutron rich nuclei I