

Neutron deficient exotic nuclei and the Physics of the "proton rich side" of the nuclear chart



Monday 21 February 2011 - Wednesday 23 February 2011

Colegio Rector Peset

Scientific Programme

Neutron deficient exotic nuclei and the Physics of the "proton rich side" of the nuclear chart
(Valencia 21st-23rd February)

Topics: Isospin symmetry and $N \sim Z$ nuclei (in-beam experiments) Isospin symmetry (reactions/beta-decay) Fundamental symmetries (Superallowed decays, weak interaction studies...) Precise $T_{1/2}$ measurements and branching ratios Precise Mass measurements Rp-process The ^{100}Sn region One and two p radioactivity Beta-delayed proton-emission and exotic decays in light nuclei Shape coexistence and shape mixing (mass 70, mass 200) Dynamical symmetries Alpha clusters Spectroscopy of SH or very heavy nuclei, decay tagging Proton breakup experiments and their use for theoretical description of astrophysics rates np pairing in $N=Z$ nuclei studied through $2N$ transfer reactions Collective modes in proton-rich nuclei Explosive hydrogen burning studied with RIB - Nuclear reactions nucleosynthesis with proton-rich exotic beams