



Contribution ID: 105

Type: Oral

TRACE status and perspective for the new RIB facilities

Tuesday, 22 May 2012 12:00 (20 minutes)

Various physics themes have been addressed, during the AGATA Demonstrator experimental campaign at LNL, by exploring different mass regions in the nuclear landscape, ranging from the study of the hydrogen burning CNO cycle in the light ^{15}O nucleus to the non-yrast octupole-deformed bands expected in the moderately p-rich ^{222}Th , ^{220}Ra heavy nuclei.

In this such campaign the complementary detectors had a prominent role, making possible, by increasing the sensitivity of the gamma-tracking spectrometer, the study of both proton- and neutron-rich nuclei away from the valley of beta stability.

In particular the light-charged-particle detector TRACE has been used in the study of the origin of cluster-bands in ^{21}Ne and of high-collective dipole and quadruple modes in ^{208}Pb and ^{90}Zr . In addition the use of digital pulse shape analysis recently revealed to be an efficient technique for the discrimination of low-energy charged particles.

The present contribution focuses, at the end of a successful AGATA campaign at LNL, on the status of the highly segmented silicon array TRACE in the context of the European partner projects, like GASPARD(SPIRAL2) and HYDE(FAIR), and in view of the construction of the radioactive beam facility SPES at LNL (Italy).

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Session Classification: Instrumentation

Track Classification: Instrumentation