PROGRESS OF THE SPIRAL2 PROJECT

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Abstract

The SPIRAL2 facility will extend the possibilities offered at GANIL to heavier radioactive beams, with much higher intensities: it will provide intense beams of neutronrich exotic nuclei created by the ISOL production method. The extracted exotic beam will be used either in a new low energy experimental area called DESIR, or accelerated by the existing SPIRAL 1 cyclotron (CIME. The intense primary stable beams (deuterons, protons, light and heavy ions) will also be used at various energies for nuclear physics, as well as for neutron-based research and multidisciplinary research, in dedicated caves called S3 and NFS. During year 2008, the decision has been taken to build the SPIRAL2 machine in two phases: - first phase including the driver accelerator and its associated new experimental areas (S3 and NFS caves), - second phase including the RIB production part, with the low energy RIB experimental hall called DESIR, and the connection to the GANIL existing facility for post-acceleration by the existing CIME cyclotron. The SPIRAL2 facility is now in its construction phase, with the objective of obtaining the first beams for physics during year 2014 with the first phase.

CONTRIBUTION NOT RECEIVED