

Post-doctoral position for HRS development at CENBG Bordeaux

CENBG is involved in technical developments for the DESIR facility [1] at different levels. One of these developments presently being pursued is the commissioning of a high-resolution mass separator HRS [2]. The HRS, a 180° separator with two dipole sections, is now completely mounted at CENBG and will be commissioned in the next 2 to 3 years before its transfer at the entrance of the DESIR facility at GANIL/SPIRAL2, the construction of which should be terminated in 2022. Different stable beams, either from a small surface ion source or from a plasma ion source feeding an RFQ cooler and buncher called GPIB, can be injected into the HRS at CENBG for commissioning and testing the HRS.

CENBG is looking for a 2-year post-doctoral fellow to participate in this program. Candidates should have completed the PhD in Nuclear Physics or a related subject since less than 5 years. They are expected to have good knowledge in experimental techniques, ion optics and ion optics simulation tools (e.g. ZGOOBI, COSI INFINITY, SIMION etc.) as well as scientific programming. They will work in a highly competitive international environment. The main tasks for the successful candidate will be to drive the commissioning of the HRS by performing ion beam measurements and comparing them with ion optical codes in order to match measurements and simulations. The final aim of the development is to reach a mass resolution of $\Delta m/m$ in excess of 15000.

The fellow will integrate either the Instrumentation department or the Exotic Nuclei research group of CENBG and will also be given the opportunity to participate in the experiments the group carries out on various facilities (GANIL, JYFL, RIKEN, ISOLDE...) on DESIR related physics.

Researchers or research engineers interested in the position are requested to submit a motivation letter, a CV as well as support letters to Bertram Blank (blank@cenbg.in2p3.fr) before March 15, 2019.

[1] <https://www.ganil-spiral2.eu/en-GB/scientists/ganil-spiral-2-facilities/experimental-areas/desir/http://www.cenbg.in2p3.fr/desir/>

[2] T. Kurtukian Nieto et al., Nucl. Instrum. Meth. B 317 (2013) 284