Permanent position in experimental nuclear physics

The Grand Accélérateur National d’Ions Lourds (GANIL) is a large-scale facility focusing on cutting-edge research in fundamental nuclear physics, using ion beams. This is supplemented by strong programs in accelerator-based atomic physics, condensed matter physics, radiobiology, and industrial applications. The SPIRAL2 facility a major upgrade, with the most intense beams from protons to Ni up to 14.5 MeV/A as well as continuous and quasi-mono energetic beams of neutrons up to 40 MeV in an advanced stage of commissioning. The intensity and variety of beams (charged particles and neutrons) delivered by the cyclotrons and the LINAC at the same center makes it a unique multi-disciplinary facility. Neutrons For Science (NFS) facility is a new experimental area at SPIRAL2 which started operation in December 2019. NFS is dedicated to the study of reactions induced by intense beams of neutrons, protons, deuterons and ions. The wide energy range of neutrons will be used to address questions in fundamental science as well as for applications related to transmutation of nuclear waste, design of future fission and fusion reactors, nuclear medicine and material science.

GANIL is looking for a highly motivated experimental nuclear physicist with a proven track record in studies using neutron beams and addressing related physics questions. The candidate is expected to have the necessary related technical skills. He/she is also encouraged to take part in other experimental programs at the cyclotrons related to activities compatible with those developed in NFS.

The successful candidate will be a member of the Physics division. He/she is expected to develop an original research program and to broaden the range of possible research lines at NFS. The successful candidate will contribute to scientific and technical programs at NFS along with the local group. He/she will participate in all the scientific coordination and support to the entire international community of NFS. This latter will be performed in close collaboration with other divisions of GANIL and the spokespersons of the experiments. The candidate is also expected to be involved in academic training of students and young researchers.

A Ph.D. in experimental nuclear physics is required, with preferably significant experience. Young researchers with high scientific potential are also invited to apply. A broad knowledge of the physics with neutron-induced reactions and neutron-detection techniques is necessary. Expertise in simulation (MCNP, GEANT4) and common data analysis tools such as CERN/ROOT is highly desirable.

Candidates should send a letter of motivation, a curriculum vitae and list of publications, five important publications highlighting their contributions Three letters of recommendation, and an electronic copy of their PhD thesis as well as the corresponding report should also be provided. The applications should be sent by email to the following address: nfs_recruitment@ganil.fr. The last date for applications will be the 30th of September. The short-listed candidates will be interviewed in early November 2020.