

Staff scientist position in the Nuclear Physics Division at CEA Saclay

The Department of Nuclear Physics (DRF/IRFU/DPhN) of the French Atomic Energy and Alternative Energies Commission (CEA) in Saclay invites applications **for a staff scientist position in the experimental low-energy nuclear structure physics group.**

Research at DPhN involves four areas: Nucleon and Hadron Structure, Quark-Gluon Plasma, Nuclear Reactions and their Applications, and Nuclear Structure.

In the latter area, the Laboratoire d'Études du Noyau Atomique (LENA, Laboratory for Nuclear Structure Studies) addresses a wide range of problems involving the experimental and theoretical study of the structure and spectroscopy of the atomic nucleus in its extreme states.

The candidate is expected to contribute to the experimental program according to the scientific objectives of the group. She/he will propose and develop an original research program related to the study of the evolution of structural and dynamical properties of atomic nuclei (shell structure, shape evolution and coexistence, giant resonance excitations...). This program should include a strong component related to the experimental involvement of LENA physicists at GANIL/SPIRAL2 (S3, NFS and LISE, VAMOS). The candidate would notably take part in the commissioning of the S3 spectrometer and the challenging physics studies that will be undertaken with this new instrument.

In the longer term, the candidate will contribute to a high-level research programme using major nuclear physics facilities and, in particular, will participate in the development of the future GANIL, in collaboration with theoreticians and experimentalists of LENA.

Required Profile

Candidates will preferably have several years of experience in experimental nuclear physics. Young researchers with high scientific potential are also invited to apply. A wide knowledge of nuclear structure physics is mandatory. A strong expertise in experimental techniques and simulations is highly desirable, such as:

- Excellent record in the realization of experiments at international accelerator facilities;
- Skills for the development of detection devices, their electronics and their integration in the data acquisition systems;

- Expertise in data analysis and in-depth capabilities to develop numerical simulations (e.g. GEANT 4).

Candidates should send a cover letter describing their research activities and prospects, a Curriculum Vitae including a list of recent or important publications, at least two letters of recommendation, a copy of their PhD thesis as well as the jury reports on their manuscript and/or PhD defense when applicable. Documents should be sent by email to danielle.coret@cea.fr and nasser.ajimi@cea.fr (cc barbara.sulignano@cea.fr).

For full consideration, all application materials must be submitted by the 10th of March 2023. A committee will release the list of candidates selected for an interview before end of March 2023. The interviews of selected candidates are foreseen before end of April 2023. For inquiries, please contact Barbara Sulignano (barbara.sulignano@cea.fr).