Postdoctoral position in experimental nuclear physics

A postdoctoral position in experimental nuclear physics is opened at the Centre de Sciences Nucléaires et de Sciences de la Matière, Orsay, France. The successful candidate will join the Nuclear Structure Group (SNO) for a 2 year contract. He/She will be actively participating in the present research program of the SNO group with a main emphasis on the activities related to utilisation of the AGATA gamma-ray spectrometer at GANIL.

The laboratory
Centre de Sciences Nucléaires et de Sciences de la Matière, Orsay is a joint laboratory of CNRS and University of Paris Sud with about 40 researchers and 40 engineers and technicians. Its specificity is related to its multidisciplinary character with most of its activities centered on nuclear physics techniques. The research groups include: Nuclear Structure Physics; Astrophysics (both Nuclear and Solid-State); Solid-State Physics and Chemical physics of irradiation. The Nuclear structure group is one of the biggest at CSNSM with a total of 19 people.

The Nuclear Structure Group
The Nuclear Structure Group “SNO” is the driving force behind a number of projects covering the entire nuclear chart from the very light to the super-heavy nuclei. The research subjects to be mentioned are: mass measurements and mass evaluations; fission and structure of exotic nuclei; structure of heavy and super-heavy elements; exotic nuclear shapes and symmetries; nuclear spin polarization; nuclear moment and transition probabilities studies. The research is done through a number of experimental apparatus, e.g. AGATA, OUPS (Orsay Universal Plunger System), GABRIELA, POLAREX, utilized at leading international laboratories like GANIL (France), RIKEN (Japan), ISOLDE (CERN), ALTO (France), JINR (Russia).

The job
The successful candidate will participate in the research programme of the group with the main emphasis on gamma-ray spectroscopy of exotic nuclei. The SNO group is leading several experiments from the AGATA campaign at GANIL on transition-probabilities investigation and g-factor measurements using OUPS at VAMOS. The successful candidate is expected to take in charge the data analysis and to prepare the publications of the results obtained. Participation in setting-up and running experiments, led by the group at other international facilities, will be encouraged. An important involvement to the development of the gamma-ray spectroscopy at the ALTO facility in Orsay will be strongly encouraged. This work, expected to lead to the installation of a high-performance gamma-ray array at ALTO, will be done in close collaboration with the NESTER group of IPNO. The successful candidate will as well take part in all aspect of everyday life duties of SNO and assist in the daily supervision of PhD students.

Applicants should have a Ph.D. in experimental nuclear physics, obtained after September 2009, or should complete it very soon. A proven track record in leading nuclear physics experiments investigating exotic nuclei, analysing the data and publishing the results in a timely manner will be considered beneficial.

Candidates should send a motivation letter, including a brief description of their work experience, a short CV and recommendation letters to Georgi Georgiev (georgi.georgiev@csnsm.in2p3.fr, +33 69 15 45 24) by 3 April 2015. The selected candidates will be contacted for an interview by mid-April. The Post-Doctoral contract will be starting in September 2015. Any further inquiries should be sent to the following e-mail address georgi.georgiev@csnsm.in2p3.fr.