

## Post-doctoral position in experimental low-energy nuclear physics at IPN Orsay

Applications are invited for a post-doctoral position funded by the “Laboratoire d’Excellence Physique des 2 Infinis et des Origines -- P2IO”. The successful candidate will join the Nuclear Structure group of the Institut de Physique Nucléaire (IPN) in Orsay (France) for a 2 years position. He/She will be expected to play a leading role in the group’s  $\beta$ -delayed spectroscopy program currently performed at the ALTO ISOL facility.

ALTO, conceived and constructed at the IPN Orsay, is the first ISOL facility based on the photo-fission production mechanism operated in the world. Three movable-tape-based  $\beta$ -delayed spectroscopy setups are routinely operated at the PARRNe mass separator, including BEDO and TETRA, allowing for complementary  $\gamma$ , CE and neutron detection and fast-timing measurements. Further developments for extending measurements capabilities to low-temperature and laser-pumping nuclear orientation (POLAREX and LINO projects) and high-precision mass measurements (MLLTrap@ALTO project) are being pursued.

The primary and first task of the successful candidate will be to vigorously push forward the emerging program aiming at the investigation of the neutron-threshold region of very neutron rich nuclei spectra, by means of  $\beta$ -delayed neutron and high-energy  $\gamma$  spectroscopy techniques. Once data will have been collected and properly analyzed, his/her second task will be to assist with the theoretical interpretation of the results, using state-of-the-art microscopic (mean-field, QRPA) descriptions developed by the Bruyères-le-Châtel group in close collaboration with CSNSM, Orsay, and ultimately publish the results in a timely manner.

The appointment is for two years, starting on October 1<sup>st</sup> or November 1<sup>st</sup> 2017 the latest. The gross salary is 2605€ to 3007€/month, subject to experience and qualifications. Applicants should have completed a Ph.D. in experimental nuclear physics by the time the contract starts (and not earlier than 6 years before). Youngest candidates with no more than one previous postdoctoral contract will be considered favorably. Some acquaintance with stopped beam ISOL-type experiments, or  $\beta$ -decay experiments in general, will also be considered beneficial.

IPN is a French national laboratory funded by CNRS and University of Paris Sud (Paris Saclay), located in the Orsay Faculty of Sciences campus, 20 km south of Paris, easily reachable by regional trains (35 minutes). For more information: <http://ipnwww.in2p3.fr/>

Applications should include :

- a cover (motivation) letter, including a brief description of previous work experience,
- a short CV,
- envisaged incorporation availability,
- details of two referees that can be approached.

Applications should be directed to David Verney [verney@ipno.in2p3.fr](mailto:verney@ipno.in2p3.fr). Any further, informal inquiries should be sent to the same address. The closing date for applications is August 20<sup>th</sup> 2017.