

Postdoctoral Researcher Position at IPN Orsay in Nuclear Reactions Induced by Radioactive Beams

Our group at Institut de Physique Nucléaire (IPN) at Orsay, France is inviting applications for a position of postdoctoral researcher. Our activities are focused on the measurement of direct nuclear reactions induced by radioactive beams produced at GANIL by the ISOL (SPIRAL facility) or in-flight (LISE spectrometer) methods. We have designed and constructed a state of the art Silicon strip array (MUGAST) which is an extension of the MUST2 array and will be used at GANIL in conjunction with the VAMOS magnetic spectrometer and the AGATA gamma-ray tracking array. The upcoming 2019 campaign will focus on reactions on standard solid or innovative cryogenic light particle targets. It will deal with a wide variety of topics from nuclear shell structure and deformation to nuclear astrophysics. Our group also takes an active part in direct reaction experiments at RIKEN.

The successful candidate will be stationed at Orsay with frequent travel to GANIL (Caen, France) for setting up and participating in experiments mainly involving the MUGAST array. He/she will take on a responsible role in the operation of the array and the associated cryogenic target. The candidate will be expected to analyze with the NPTool package and interpret data from the campaigns and present and publish the results. He/she will also have the opportunity to participate in the elaboration of the next generation GRIT Si array implementing particle discrimination through pulse shape analysis.

Eligible candidates must have a PhD in experimental nuclear physics obtained since less than three years or expect to defend their PhD before the start of the appointment. The position requires the capacity of independent work in both hardware and software and good teamwork skills. The candidate will gain expertise in the use of semiconductor detectors (Si-strip and Ge), magnetic spectrometers and cryogenic targets. Prior experience with such systems and with radioactive beam experiments will be appreciated. The work requires programming knowledge in C++ and experience with the ROOT analysis framework. This is a fixed term two year appointment starting on April 1st 2019 or as soon as possible thereafter.

Interested candidates should apply directly on the CNRS website <http://bit.ly/2GISVau> (For English speaking candidates click on English at the top right hand corner of the page!) and send a copy of their CV and letter of motivation and arrange to have 2 letters of recommendation sent to Marlène Assié (assie@ipno.in2p3.fr) and Yorick Blumenfeld (yorick@ipno.in2p3.fr) before March 3, 2019. Shortlisted candidates will be invited to an in-person or Skype interview shortly thereafter.