



A 2-year postdoctoral position in experimental low-energy nuclear physics is available in the Nuclear Matter group at the Institut de Physique Nucléaire de Lyon (University of Lyon 1).

The research programme of the group concerns the Nuclear Structure and Astrophysics using gamma spectroscopy of exotic (spin and/or isospin) nuclei. The future facility SPIRAL2 which will produce high intensity beams of exotic heavy nuclei, associated with the European γ -detector AGATA (Advanced GAMMA Tracking Array), will give us the opportunity to improve our knowledge of the structure of these nuclei and to test nuclear models in extreme conditions of deformation and angular momentum. For the last two years, the group has been working on a partial reorientation of its activity towards nuclear astrophysics by setting up a collaboration mainly with a GANIL team. This resulted in the group involvement in several experimental projects, among which a proposal accepted by PAC GANIL/SPIRAL2 (E719) and a Letter of Intent for NFS/SPIRAL2. The main goal of these experiments is the measurement of key reaction cross sections to constrain the astrophysical models and explain the abundances of p-nuclei.

The successful candidate will take an important part in the preparation, realization, analysis and interpretation of the experiments with AGATA during the NEDA-DIAMANT campaign at GANIL, and the preparation of the nuclear astrophysics experiments at NFS/SPIRAL2 simulating the possible setup with the tools developed in the group (SToGS + GammaWare).

Applicants must have a Ph.D. in experimental nuclear physics (preferably with experience in γ -spectroscopy) and sound skills in C++, ROOT and/or GEANT4. A good acquaintance with theoretical models is welcome.

The position is funded by the IN2P3/CNRS for a 2 years duration starting from Autumn 2017. Applicants should submit a Curriculum Vitæ with a description of their research experience, a letter of motivation and the names of two referees to the following address :

Dr Nadine Redon
Institut de Physique Nucléaire de Lyon
4 rue Enrico Fermi
69622 Villeurbanne Cedex
France
e-mail : n.redon@ipnl.in2p3.fr

The deadline for applications is June 30th, 2017.
More information can be obtained at the address given above.