Postdoctoral position in experimental nuclear physics

The FALSTAFF collaboration is inviting applicants for a postdoctoral position at GANIL in Caen (FRANCE). The contract is for two years, renewable once by common agreement.

FALSTAFF is a fission fragment spectrometer to study the neutron-induced fission of actinides in the rapid domain. Its development was launched some years ago by the DPhN department of IRFU/CEA Saclay. The first part of the spectrometer is built and is under final test. It will soon be transferred to GANIL to benefit of the upcoming Neutrons For Science facility at GANIL, that will open a neutron energy window poorly studied so far.

FALSTAFF is designed and developed to study the characteristics of the fission fragments detected in coincidence. Their energy and their masses before and after evaporation will be determined in order to extract the correlation between the average neutron multiplicity and the mass before evaporation. This correlation is a relevant piece of information to understand the excitation energy sharing and to improve of fission and evaporation models.

The dynamic candidate is expected to take a significant part in the FALSTAFF detector tests, the setup mounting, the experiment achievement, and all relevant analyzes including GEANT4 simulations. The candidate will take office at GANIL and work in collaboration with GANIL and IRFU/Saclay colleagues.

The successful candidate must have a Ph.D. in nuclear physics and should have demonstrated expertise in instrumentation, simulation and data analysis. Programming skills in C++ is mandatory. As the candidate will have to work in close collaboration with technicians, engineers and scientists, good communication skills and a proactive behavior are required.

Candidates should send a cover letter describing their research activities and a Curriculum Vitae including a list of publications and two letters of recommendations. All application materials should be submitted to Xavier Ledoux (xavier.ledoux@ganil.fr) by September 15, 2021 for a taking office in Fall 2021.