



CEA Saclay
Nuclear Physics Division IRFU/SPhN

Postdoctoral position in experimental fission physics

A postdoctoral position in experimental nuclear physics is available in the Nuclear Physics Division of CEA Saclay, France. The candidate will work on the FALSTAFF (Four Arm cLover for the Study of Actinide Fission Fragments) experimental setup, which is dedicated to the study of the fission mechanism. After an R&D phase and the test of a prototype, the final setup is under construction. The candidate will be responsible for the tests of the first arm of the spectrometer and the preparation of the full setup for the first experiment with a neutron beam.

The FALSTAFF project is dedicated to the study of the fission mechanism from the fundamental point of view and for application purposes. Even after more than 70 years of research, our understanding of the fission process has still to be improved. Complete data sets (fragment charge, pre and post fragment mass, fragment energies, neutron multiplicity, ...) are now necessary to reconstruct the landscape at the scission point. In addition to the improvement of our understanding of the fission process, FALSTAFF will also provide data needed for simulation of the new generation of reactor. In this context the FALSTAFF team has close collaboration with people involved in the development of fission models.

The FALSTAFF experiments will take place at NFS where neutron beams from some 100 keV up to 30 MeV will be available. Few complete data are available in this energy domain. FALSTAFF at NFS will then bring an important piece of information about the fission of actinides.

Applicants are required to have a PhD in experimental nuclear physics or in a field related to instrumentation. They are expected to have a strong motivation for instrumentation and experience in modern data analysis tools. Interested candidates could contact Diane Doré at diane.dore@cea.fr. A motivation letter, curriculum vitae and two reference letters are required. Applications will be accepted until June 3rd 2016 and review will begin immediately.

The position is for one year, renewable upon mutual agreement to a second year. Effective starting date might be for the Fall 2016.