

RECRUITMENT FOR A TEACHING AND RESEARCH PROJECT CONTRACT STARTING IN 2025

U.F.R, School or Institute : ESIX Normandie Cherbourg	
Research group : Laboratoire de Physique Corpusculaire de Caen-LPC Caen	
Type of application :	CDD Lecturer-Researcher (36 months – teaching service : 128 hours/year)
CNU Section :	29 ème
Libellé général profil publication :	Enseignant-chercheur contractuel
Starting date :	February 1st, 2026
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Short job description. *Lecturer and research scientist in Nuclear Physics.*

The recruited person will teach in the GSI department of ESIX Normandie, the Engineering School of the university of Caen, located in Cherbourg. He/she will mainly teach science subjects as part of the Nuclear Engineering degree program and also provide support for other degree programs in the department.

He/she will be involved also in initial training, continuing professional development and apprenticeships. The subjects covered will include the fundamentals of nuclear physics, nuclear safety, etc. The successful candidate will be asked to participate in monitoring projects, internships and other training activities.

Research activities will be carried out within the 'Nuclear Science Applications' division of the Particle Physics Laboratory (LPCC, UMR6534) of Caen, as part of the AMI (Medical and Industrial Applications) team. The recruited person will work in collaboration with a lecturer-researcher recruited in 2025 at ESIX, who is currently developing research activities at the ASNR laboratory in Cherbourg, in close collaboration with the AMI research team at LPC Caen, where he will be able to benefit from the support of technical services specializing in nuclear instrumentation.

Keywords: Ionising radiation detectors; Instrumentation; Nuclei and particles; Theory and modelling.

I. TEACHING :

- Levels : ☐ Licence X Master

- Degrees : Engineering degree, mostly in : Nuclear Engineering, but also industrial and energy engineering if needed. For both students and work-study students.

- Domains :

The successful candidate will teach a minimum of 128 hours of lectures and tutorials. The main areas of teaching will cover:

- Radiation protection.
- Introduction to nuclear safety.
- Atomic nucleus stability and radioactivity.
- Radiation-matter interaction (physical phenomena, measurements and nuclear instrumentation).
- Fuel cycle. Primary loop.
- Nuclear digital, virtual reality.

In addition, he/she will supervise apprentices.

The recruited person will also be involved in supervising student projects. He/she will also be involved in the running of the Nuclear Engineering degree program (examination boards, REX, etc.).

He/she will participate in the development of the Nuclear Engineering training platform.

He/she will contribute to the development of new digital practical work in nuclear physics, with the available equipment as well as new equipment acquired as part of the AMI CMA 3NC program (New Nuclear – New Skills), with a view to opening a Nuclear Engineering training platform incorporating virtual reality technologies.

Objectives in terms of content and teaching supervision:

The successful candidate will teach in the GSI department of ESIX Normandie in Cherbourg. He/she will mainly teach science courses as part of the Nuclear Engineering degree program. However, he/she may also be required to teach other courses in the department.

II. RESEARCH :

Research activities will be conducted within the ‘Nuclear Science Applications’ division of the Particle Physics Laboratory (LPCC, UMR6534) of Caen, as part of the AMI (Medical and Industrial Applications) team. The LPCC wishes to develop its socially-oriented research activities while strengthening its ties with major local players in the nuclear field. The opening of this position at ESIX on the Cherbourg site is an excellent

opportunity to support the newly recruited senior lecturer, who is starting a collaboration with the Atmospheric and Aquatic Radionuclide Transfer Service (PSE-ENV/STAAR) of the ASNR (French Nuclear Safety Authority) in Cherbourg-en-Cotentin, which is composed of two research teams (atmospheric and marine) working on experimentation, numerics and metrology dedicated to the study of transfers. STAAR is a tri-site service (Fontenay-aux-Roses, Cadarache and Cherbourg-en-Cotentin) that brings together teams of transfer researchers and specialists in IT development applied to simulations and artificial intelligence (AI).

The Cherbourg site has a Sample Processing and Metrology Platform (TEEM-CHER) that brings together resources for receiving, storing, preparing and packaging various types of samples taken from the environment (soils, terrestrial and aquatic plants from continental and marine environments, atmospheric deposits, etc.). These samples are intended for analysis for monitoring, assessment, research and development purposes, or for use in experiments planned as part of the Transfer or Environmental Health programs in particular. The facility has radioactive metrology resources enabling certain samples to be analyzed using gamma and scintillation spectrometry.

Depending on the profile of the successful candidate, the activities of the position at the ASNR in Cherbourg may include:

- Development and innovation in engineering and instrumentation and metrology methods in support of research on atmospheric and marine transfers;
- The use and integration of simulation codes and tools such as AI;
- Participation in field activities or support for research projects conducted within STAAR or other ASNR departments.

The successful candidate will carry out his research activities in close collaboration with the local senior lecturer and the AMI research team at LPC Caen, where he will benefit from the support of technical services as well as specialists in nuclear instrumentation.

Application procedures

Candidates can submit their complete application (CV, cover letter, and copy of their most recent diploma) by email to campusmanche.moyenspedagogiques@unicaen.fr

with a copy to drh.recrutement.enseignants@unicaen.fr, before November 13, 2025.