

A coordinator of XEMIS2 camera operations at Nantes University

Mention the profession references to which the job relates



43,000

students, including more than 5,000 international students



4,600

administrative and technical staff



3,257

teachers, teacher-researchers



1,500

nearly 1,500 doctoral students



42

research structures

Nantes Université is a public institution of higher education and research which proposes **a unique model of university** in France, uniting a university, a university hospital (CHU de Nantes), a technological research institute (IRT Jules Verne), a national research organisation (Inserm) and also Centrale Nantes, Ecole des Beaux-Arts Nantes Saint-Nazaire and Ecole d'Architecture de Nantes.

These players are joining forces to **develop the excellence of Nantes' research** and to offer **new training opportunities** in all fields of knowledge.

Sustainable and **open to the world**, Nantes Université ensures that its students and staff have the best study, research and working conditions for their on-going professional development on all Nantes Université's campuses, in Nantes, Saint-Nazaire and La Roche-sur-Yon.

Working environment and context

• **Location: Nantes**

You will join the research team deployed by the SUBATECH laboratory to implement and then operate an innovative camera dedicated to functional gamma imaging of small animals at the Nantes University Hospital. Entirely assembled, designed and installed by the SUBATECH laboratory, the XEMIS2 camera is the result of a collaboration with other players involved locally in research, the LS2N laboratory, the CRCI2NA laboratory, the Nuclear Medicine department of the Nantes University Hospital and the GIP ARRONAX; you will organize interactions between the teams involved in order to define the operations and functioning of the camera at Nantes University Hospital for the next 3 years.

Missions

You will be deployed on the Nantes University Hospital site within the CIMA medical imaging platform; you will also have an office on the IMT Atlantique site in Nantes within its SUBATECH department. You will participate in all research activities carried out with the XEMIS2 camera for the next three years and you will coordinate the functioning of its operations in close collaboration with the research laboratory teams mobilized for this great adventure. You will ensure the scientific promotion of your research work by participating in the writing of scientific articles and participating in international conferences.

Main activities

- *Experimental expertise: you will be able to understand the operating principle of all the steps allowing the XEMIS2 camera to produce an image in the best conditions.*
 - *Ingenuity and curiosity: you will be able to propose functional solutions to experimental problems that would be encountered during commissioning and/or during operation of the camera.*
 - *Supervisory capacity: you will be able to bring together and mobilize internship or thesis students so that they take ownership of the operation of the camera and contribute to its operation.*
 - *Projection and management capacity: you will be able to establish a dynamic schedule of camera operations so that they produce the best possible images while taking into account the human and material constraints present.*
- *Capacity for communication and scientific dissemination: you will participate in events aimed at promoting the imaging capabilities of the XEMIS2 camera; you will contribute to the writing of scientific articles that will have a broad impact on the community.*

Profile required

- Education and/or qualification: Thesis in Nuclear or Particle Physics
- Previous experience welcome for the position: No

Position open to agents likely to take advantage of a legal priority in accordance with the provisions of article 60 of the law of January 11, 1984 on statutory provisions relating to the State civil service (on presentation of proof).



Skills and knowledge required

General, theoretical or disciplinary knowledge:

Scientists: Nuclear and particle physics, Gamma Medical Imaging, Instrumentation, Physical measurement, Simulation, Information reconstruction, Programming

Linguistics and literature: good practice of scientific English, good writing skills

Operational skills:

Experimental expertise, knowledge or expertise:

- In the deployment of physical measurements based on photodetectors and ionization chambers
- In the cryogenics of liquid xenon
- In real-time acquisition and embedded electronics
- In the IT environment and the processing of scientific data
- In the reconstruction of information and in its scientific representation

Soft skills:

Curiosity, international openness, cultural openness, sense of management, respect for others

Contacts:

Contact person for further information on the position:

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Please send your application (CV + mandatory covering letter) exclusively by e-mail to recrutement-biatss@univ-nantes.fr and ressources_humaines@subatech.in2p3.fr



Advice for the candidates:

... Do not hesitate to consult the website of Nantes Université