MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE
Liberté Égalité Fraternité

UNIVERSITÉ CAEN NORMANDIE

Job description for recruitment
Junior Professor Chair
2025 campaign

Faculté des Sciences
University : University of Caen-Normandie **Education Location :** UFR Sciences **Research location:** CIMAP laboratory

Identification de l'emploi
Research area : Physics **Key words : Astrophysical ices, ion/matter interaction, orbitrap** **Project title and acronym: GERM, Ice exposed to multiple radiation, a more realistic approach?** **CNU Section: CNU30** **Job status :** vacancy
Duration : 4 to 6 years. Tenure will be as "Professeur des Universités"

Job profile

The University of Caen-Normandie is recruiting a Junior Professor on a 4 to 6 years contract. The person recruited will teach 64 hours in the Physics Science department of the UFR des Sciences. The person recruited will carry out research in the CIMAP UMR 6252 laboratory in the field of astrophysical ices exposed to multiple radiation.

Education profile

Types of course concerned: The recruited candidate will be required to teach the classic physics subjects in the various years of the Licence or Master's degrees.

Teaching objectives and staffing requirements:
In addition to teaching and pedagogical supervision, the candidate is expected to contribute to the management and coordination of the Science UFR's PCI department's training offer. In particular, he/she could contribute to the development of the ERASMUS Mundus NucPhys Master's program, by offering courses in English on collision physics applied to astrophysics. These courses could also be offered to doctoral students in our PSIME graduate school.

Research profile

Hosting laboratory strategy

One of the CIMAP laboratory's main areas of research is the study of the effects of ionizing radiation on ice analogues present in the interstellar medium and stellar systems, in order to understand the formation and stability of complex molecules in these environments. Laboratory astrophysics has seen strong growth in recent years. The number of proposals for associated experiments submitted to GANIL by outside teams is rising steadily, and currently accounts for almost a third of beam time requests. The recent funding of the

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MIRRPLA project as part of the PEPR ORIGINS program should further boost activity, as the device developed will be the only one of its kind in the world. Candidates should propose a research project in this context.

Activities in this field generate communication with the society. The candidate will be regularly asked to give lectures for the general public and to take part in popular science events, such as the Fête de la Science or the FENÔ (Festival de l'excellence normande), while contributing to the development of mediation tools around these issues.

Summary of the scientific project

The research project will be a large-scale project based on instruments developed at CIMAP to understand the origin of primitive organic matter during the formation and evolution of the solar system. In astrophysical environments, matter is constantly exposed to multiple types of radiation (photons (UV, RX), electrons, cosmic rays, ions from solar winds and ions trapped in magnetospheres). These different types of radiation act simultaneously, and their combination in the MIRRPLA device will make it possible for the first time to study their synergistic effects on matter, opening up major research opportunities.

The candidate should have solid experience in instrumental development, and be able to propose a research project involving the irradiation of astrophysical ice analogues containing small molecules or more complex organic matter. Mastery of analytical techniques such as infrared spectroscopy (FTIR) and mass spectrometry (QMS and ORBITRAP) is highly recommended. In the context of this research project, the existence of an already-established network with the laboratory astrophysics community (experiments and modeling) and a link with observations would be a definite advantage for the candidate.

Contacts

Education and research : boduch@ganil.fr
Administrative issues : drh.enseignants@unicaen.fr

Applica5on and recruitment procedures

Applications are open from the 7th of july 12:00 noon (Paris time) to 26th august 2025, 12:00 noon (Paris time). Applications must be submitted via ODYSSEE application, except for applicants who do not have access to this Galaxie application (in particular those living abroad). They can submit the full applicati.on electronically (see contacts below) in accordance with the timetable and procedures laid down.

The documents to be attached to the application file are set out in the Order of 6 February 2023, as amended, relating to the general terms and conditions for transfers, secondments

and competitive recruitment of lecturers, university professors and junior professors (see in particular Title III, articles 24 to 27 and Title IV, articles 28 to 31). :

- **photographic identification ;**

- proof of possession of a PhD or a diploma, title or qualification recognized as equivalent;

- the examination report for the diploma produced or a statement from the institution certifying that no examination report has been drawn up;

- an analytical presentation of the works, books, articles, achievements and activities related to the profile of the post in question, mentioning those that the candidate intends to present at the audition;

- a copy of each of the works, books, articles and achievements mentioned in the analytical presentation and which the candidate intends to present at the audition, not exceeding 6 documents.

Applicants who do not hold a PhD must have their university diplomas, qualifications and titles recognized as equivalent to a PhD in accordance with one of the procedures set out in article 5 of decree no. 2021-1710 of 17 December 2021 relating to the junior professorship contract provided for in article L. 952-6-2 of the Education Code and article L. 422-3 of the Research Code.

Any application incomplete by the above-mentioned deadline will be declared inadmissible.

Only candidates selected by the selection committee on the basis of their applications will be invited to an audition.

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Application for a Junior Professorship

1. Curriculum Vitae

1.1. Personal data

Name	
First Name	
Nationality	
Birth date	
Highest degree obtained in higher education	
E-mail	
Cell phone	
Personal address	
Business professionnelle	

1.2. Professional experience

Year	Position	Organization or structure
Latest		
...		
older		

1.3. Scientific expertise (max 10 lines)

1.4. Keywords (max 5)

1.5. Major events in scientific career

List up to 5 highlights from your scientific career

1.6. Relationship to the socio-economic world

Contracts, advisory members, consulting, expert role, etc..

1.7 Dissemination of science

List the occasions/events that allowed you to disseminate your work to the general public.

2. Research activities

2.1. Description of the scientific background (max 1 page)

2.2. Scientific project related to the junior professorship (max 3 pages)

2.2.1. Scientific context of the proposed work
2.2.2. Description of the scientific project
2.2.3. Scientific obstacles related to the project
2.2.4. Indicators for monitoring the progress of the project
2.2.5. Dissemination of research to the general public

3. Teaching activities

3.1. Teaching experience in higher education (max 2 pages)

3.2. Pedagogical project in connection with the junior professorship at the host institution (max 2 pages)

4. Complete list of contracts and funding obtained in research activities

Year	Source (agency, collectivity, company, …)	Project title	Name of the coordinator	Budget (€)	Your role in this project

5. List of major publications, books, patents, oral presentations, poster presentations

5.1. summary

Number of refereed publications	
Number of other publications (proceedings, symposium proceedings, book chapters, ...)	
Number of patents	
Number of oral presentations	

Number of poster presentations	
Number of invited seminars	

5.2. Peer-reviewed published articles

[1]. Title of article, authors, Journal, Volume, pages, (year). Number of citations.
[2]. …….

5.3. Other publications (proceedings, symposium proceedings, book chapters,...)

[1]. Title of article, authors, Journal, Volume, pages, (year). Number of citations.
[2]. …….

5.4. Patents

Fill in the table for each patent.

Name	
Inventor(s):	
Patent number	

5.5. Oral presentation

[1]. Title of the presentation, name of the conference, conference acronym, date, city, country.

[2]. …..

5.6. Poster presentations

[1]. Title of the paper, name of the conference, conference acronym, date, city, country
[2]. ……

5.7. Invited seminars

[1]. Title of the seminar, inviting structure, person inviting to the seminar, date of the seminar, city, country

[2]. …..