

RECRUITMENT NOTICE Chaire de Professeur Junior (CPJ) For a duration of:5 years

Recruitment for a research and teaching project on a fixed-term contract known as the "Chaire de Professeur Junior" aims to allow the candidate, after evaluation of its scientific value and professional aptitude, to access a permanent position as university professor.

Details regarding the recruitment process and the contract are available online: https://www.uca.fr/universite/travailler-a-luca/recrutement-chaire-professeurs-juniors

Job description and project statement

Title of contract and position to be filled:

Position: Professor

Hosting institution: Clermont Auvergne University

Name of the head of establishment /organization:Mathias BERNARD

Location: Clermont-Ferrand

Academic region: Auvergne Rhône Alpes

Position number:

Component:UFR de Mathématiques

Laboratory: laboratoire de mathématiques Blaise Pascal (LMBP)

Partners institutions/organizations: CNRS

Project name: Algebra and Representation Theory

Key words: Fundamental Mathematics, Algebra, Representation Theory, Group Theory, Topology,

Number Theory

Intended duration: 5 years

Scientific theme: Mathematics

Corresponding CNU/CoNRS/CSS section(s): CNU 25 / CNRS 41

Research fields EURAXESS:

Champs 1	Sous-champs 1	Champs 3	Sous champs 3
27. Mathematics	27. Algebra	27. Mathematics	27. Geometrry
Champs 2	Sous champs 2	Champs 4	Sous-champs 4
27. Mathematics	27. Number Theory	27. Mathematics	27. Mathematical Analysis

Job profile: Algebra, Representation theory



University strategy:

Labeled I-SITE since 2017, UCA affirms its identity as a territorial university of excellence, and its ambition to support the scientific fields in which it has acquired international renown. The research carried out in mathematics within the LMBP strongly contributes to the national and international reputation of the institution. A major component of the federation of mathematics research in the AURA region but also of the GIS Institute of Mathematics for Planet Earth, the LMBP is an integral part of the site's scientific policy priorities. The scientific project of the junior professorship on the theme "Algebra and representation theory" will accentuate the international recognition acquired in this field and contribute to the dynamism of the community.

Concerning the CPJ system, since 2021, the UCA has opened 6 CPJs and 5 have already been recruited. Three of the winners were stationed abroad at the time of their recruitment. The UCA's strategy was to prioritize UMRs and propose job profiles previously discussed with the national research organisms to support a common strategy. If three of them have just been recruited, which does not allow any impact to be assessed, the UCA is pleased that one of the CPJ 2021 holders (Louie Corpe) is submitting an ERC Starting Grant project in 2023.

Laboratory strategy:

The LMBP is a Joint Research Unit of Clermont Auvergne University and the CNRS (UMR 6620) structured into four teams covering a broad spectrum. It develops high-level research in both fundamental and applied mathematics, with numerous interdisciplinary interactions and active participation in emblematic actions of the I-site as well as Factolab and Simatlab (Michelin shared Lab). Its influence is reflected in an ERC consolidator grant project (Simon Riche, GAAO team, in algebra), a senior IUF 2020-2025 (Arnaud Guillin, PAS team, in probability) and a junior IUF 2015-2020 (Frédéric Bayart, PAS team, in functional analysis). The laboratory's strategy is to use CPJ recruitment to strengthen and develop its strongest themes, thus allowing the emergence of centers of excellence with strong international influence. So, as part of this CPJ recruitment, the area that we want to focus on is algebra.



DRH- Pôle Développement des Compétences Service Recrutement et Mobilité

Scientific project:

Simon Riche has since his arrival at LMBP in 2009 developed an activity at the highest international level in representation theory, rewarded with an ERC starting grant in 2015, a CNRS bronze medal in 2016, an ERC consolidator in 2021, he recently obtained the Claude Berthault Prize/Fondation de l'Institut de France as well as a Frontiers of Science Award. CPJ recruitment in this area would make it possible to strengthen and perpetuate this remarkable dynamic which has already made the Clermont site one of the remarkable points of representation theory in France. The numerous interactions within the Geometry, Algebra, Operator Algebras team, in particular with the quantum topology theme via categorification, or with the Number Theory team via the Langlands program, ensure that such recruitment would be, very beneficial for most of the spectrum of fundamental mathematics within the laborator

Location:

Name of Director: Julien BICHON

■ Lab Director: +33 (0)4 73 40 70 75

@ Lab Director: julien.bichon@uca.fr Website: https://lmbp.uca.fr

Teaching project:

The skills provided by the Junior Professor Chair will aim to be part of the current dynamic of the UFR of Mathematics, particularly on the training courses of the SFRI program and the Graduate Track for Mathematics and Physics. The recruited person will thus be required to teach in modules common to the Masters of Mathematics and Physics, in particular an introductory module to the theory of representations which she will set up.

The recruited CPJ will also be encouraged to participate in training through research of M2 students as well as doctoral students. Also in this context she will be invited to get involved in the "Initiation to research" modules of the mathematics master's degree, and in the supervision of master's and magisterial mathematics internships (L3, M1 and M2).

Location:

Name of director: François MARTIN

■ UFR Mathematiques director: +33(0)4 73 40 76 99@ UFR Mathematiques director: francois.martin@uca.fr

Website: https://www.uca.fr/universite/organisation-et-fonctionnement/ufr-de-mathematiques

Funding:

Total financed on CPJ (Including ANR package)	200 K€
Co-financing (INRAE)	
Total funding	

The 200 K€ ANR package will be used to hire a 3-year post-doc as a collaborator of the successful applicant (160K€), for scientific visits and invitations, conference participations (35K€) and for buying equipment (5K€).



Diffusion scientifique:

The results of the project will be published in international peer-reviewed journals of the specialty and general journals, presented in the form of oral communications at national and international conferences in the fields of mathematics.

Open science:

The project is part of an approach which will be in accordance with the open science policy of the EPE UCA which reflects the commitments made in this area (https://science-ouverte.uca.fr/nos-engagements/engagements-uca).

In particular, the LMBP strongly encourages its members to publish in open access journals for readers and authors, and does not pay any APC.

Science and society:

The project and the results will be communicated to the general public in several ways:

- through popularization conferences in educational and cultural institutions or during national events such as the Fête de la Science;
- by press releases intended for local and national media (newspapers, radio stations, television channels).

The successful candidate will be able to rely on the "Science with and for society" label that the site obtained in November 2021.

Indicators:

Support will be put in place with the UCA to support and advise the candidate on administrative, regulatory, HR and financial aspects, and to seek solutions in the event of difficulties. A quarterly scientific review will be carried out with the director of the unit to monitor the progress of the project (work in progress, publications and exploitation of results), searches for additional funding, difficulties encountered and possible reorientations. This monitoring aims to ensure the best conditions for tenure at the end of the Chair.

Profile required

The LMBP wishes, through this CPJ recruitment, to consolidate its potential in algebra and representation theory. A priority is to strengthen the geometric theory of representations pole, but the profile is widely open in algebra and/or representation theory, and any high-level application on these themes or related themes that can integrate harmoniously into the laboratory will be studied with the greatest attention, the determining criterion being the quality of the candidate's work and its scientific project. Among these themes, in addition to representation theory (of groups, algebras, etc.), let us cite for example topology (quantum, algebraic or geometric), group theory, number theory (Langlands program, Galois representations, etc.), non-commutative harmonic analysis....



Job attractiveness

- ➤ The junior lecturer has a teaching service obligation on an annual basis of 64 hours HTD without the possibility of doing complementary courses,
- ➤ He/she will be supported throughout the project by a scientific advisor,
- ➤ The gross annual salary is: 41 331 € (based on INM 735),
- ➤ The junior professor will benefit from an ANR support of 200 k€ (PhD student, post-doc, project funding).

Organisation of hearings

Only those candidates who have been selected by the selection committee on the basis of their applications will be invited to the audition.

Planned role-playing YES □ NO X

The audition will last 50 minutes: it will start with a 20-minute presentation of the candidate's scientific and pedagogical background, motivations, and research and teaching projects. The audition will conclude with 30 minutes of discussion with the members of the selection committee.

At the end of the hearings, the committee will decide on the merits of the candidates, taking into account the quality and originality of their research projects, their motivations, their forward-looking vision of the field and their capacity for scientific and teaching supervision.



NOMINATION PROCEDURE AND TIMETABLE

Candidates must <u>imperatively</u> enter their declaration and submit the documents on the website GALAXIE/FIDIS:<u>https://galaxie.enseignementsup-recherche.gouv.fr/antares/can/astree/index.jsp</u>

Opening of registrations on GALAXIE: may 24, 2024, 10 a.m. (Paris time), deadline for submission of the file on GALAXIE/FIDIS: june 28, 2024, 4 p.m. (Paris time)

Any file that is still incomplete on the deadline will be declared inadmissible.

YOUR APPLICATION FILE

References:

- Decree No. 2021-1710 of December 17, 2021 relating to the junior professor chair contract provided for by article L. 952-6-2 of the education code and by article L. 422-3 of the code of the research
- Order of 6 February 2023 setting the procedures for applying for recruitment by way of junior professorship contract

The candidates send a file <u>in digital version</u> to the President of the University Clermont Auvergne. The file is accessible to the members of the selection board.

In accordance with <u>article 26 de l'arrêté du 6 février 2023,</u> the application file includes the **following documents:**

- 1) The application form entered online (under Galaxie/Fidis);
- 2) Both sides of an identity document with photograph
- 3) A document attesting to the possession of a doctorate, as provided for in article L612-7 of the education code, or for candidates who do not hold a doctorate, a diploma whose equivalence is recognized by the Council of Staff of Teachers and Teacher Researchers (CP2E) of UCA, according to the procedure set out in 1°) of article 5 of decree 2021-1710 of December 17, 2021;
- 4) The diploma defense report produced (Thesis defense report);
- It is recommended that the document be on university letterhead with the names of the referees identifiable.
- 5) An analytical presentation of the work, books, articles, achievements and activities related to the profile of the position in question, mentioning those that the candidate intends to present at the audition, **produced on the model of the** " fiche de candidature CPJ » (to be downloaded from the CPJ page of the Galaxie portal or click here)
- 6) Full work of each astide, book or achievement the candidate wishes to present during the audition. (max 6 documents)

French translation of certain documents:

The administrative documents (documents 2 and 3) as well as the defense report written in whole or in part in a foreign language must be accompanied by a translation into French, of which the candidate certifies compliance on honor. Otherwise, the file is declared inadmissible.

The translation of the analytical presentation as well as the works, books, articles and achievements is optional.

<u>In the event of multiple applications</u>, the candidate must compile a file for each position for which he/she wishes to apply.

Warning: Galaxie/Fidis is not compatible with the use of a tablet or smartphone, please use a computer only.



ADDITIONAL INFORMATION

Additional information on recruitment and the characteristics of this UCA contract are available on the Clermont Auvergne University website: www.uca.fr, "University" tab then "Working at UCA" then "Recruitment of teaching staff" and "Recruitment of Junior Professor Chair": please <u>click here</u>

YOUR APPLICATION AND STAFFING SCHEDULE

Dematerialized application:

You will not receive any paper documents from the University.

The GALAXIE/FIDIS module will allow you:

- to monitor your application(s) and the processing status of each file,
- to learn about the result of the recruitment,
- to formulate, if necessary, your acceptance of position.

Provisional timetable:

- Collection of applications: until june 28, 2024 until 4:00 p.m. (Paris time)
- Selection of applications and auditions*:september 2024
- Entry into office:From december 1, 2024

^{*} See the calendar on the UCA website: https://www.uca.fr/universite/travailler-a-luca/recrutement-chaire-professeurs-juniors