



SUBJECT TO THE APPROVAL BY THE ACADEMIC BOARD OF 24TH NOV. 2025

FULL-TIME ACADEMIC POSITION IN ALGEBRA AND COMBINATORICS

FACULTY OF SCIENCES

Reference: 2026/A008

Application deadline: 31 January 2026

Start date: 01 October 2026

Job description

The Department of Mathematics at Université libre de Bruxelles (ULB).

Within the Faculty of Science of the *Université libre de Bruxelles*, the Department of Mathematics is home to 6 research groups: Analysis and PDEs, Algebra and combinatorics, Differential geometry, Mechanics and applied mathematics, Actuarial sciences, Mathematical statistics and probability. The successful candidate will join the research group "Algebra and Combinatorics", which currently has 4 permanent members (Samuel Fiorini, Dimitri Leemans, Špela Špenko and Joost Vercruysse), as well as a number of postdocs and PhD students.

Description of the position in Algebra and combinatorics

Area of Research: The successful candidate should have a strong background in algebra and/or combinatorics, broadly defined. There are no restrictions on subdisciplines. The successful candidate will collaborate closely with the members of the research group in the disciplines relevant to their research agenda, and they will also be invited to collaborate with other research groups of the department. Members of the Algebra and combinatorics research group are, for instance, active in the fields of incidence geometry, abstract polytopes, discrete optimization, graph theory, convex polytopes, non-commutative algebra, (non-commutative) algebraic geometry, homological algebra, Hopf algebras, quantum groups, representation theory, monoidal categories.

Educational and scientific goals: The selected candidate will contribute to research and teaching in algebra and combinatorics. They essentially aim at

- developing and/or expanding on their research agenda while fostering research
 collaborations within and outside the Department of Mathematics of ULB, seeking funding
 for research projects in the field and publishing in internationally recognized peer-reviewed
 journals;
- contributing to education (bachelor, master and PhD education) by coordinating courses (preparing/updating lecture notes, teaching theory classes, preparing, supervising and marking exams, organizing exercise sessions is coordination with the teaching assistants) for the Department of Mathematics and by supervising students for study and research projects at bachelor, master and PhD level.

Courses covered at the time of recruitment:

The candidate will be expected to teach courses at various levels in the Mathematics program, and at the bachelor level in other programs at ULB (service courses). In the long run, candidates will be requested to take up a teaching load that matches the average among the permanent members in the department (currently around 110 hours theory classes per year). Although subject to possible changes, the proposed initial course load will be:

- MATH-F-122 Linear algebra (1st Bachelor in Mathematics and Physics) partim, 30h of theory classes;
- MATH-F-307 Discrete Mathematics (2nd Bachelor in Mathematics and Informatics) 36h of theory classes;
- MATH-F-427 Combinatorial algebra (Master program in Mathematics) 24h of theory classes.

The successful candidate will also be expected to gradually take up administrative tasks within the Department of Mathematics and Faculty of Sciences.

Qualifications required:

PhD Degree (with doctoral thesis) in Mathematics.

Skills required

- Applicants should have at least 4 years of research experience at the time of their recruitment. Doctoral research years count towards this qualification.
- Post-doctoral experience and exchange periods outside of the applicants' home institution (during or after their PhD) will be taken into consideration when evaluating applications.
- Candidates should have a proven record and/or pipeline of high-quality publications in internationally recognized peer-reviewed journals and be able to write grant proposals in the field.
- A good command of English at an academic level.
- Applicants who do not speak French (level B2) may be granted a period of adaptation, but they must be able to teach in French at the end of the third year following their appointment.

Interested?

For more information, please contact Joost Vercruysse (E-mail: joost.vercruysse@ulb.be).

Your application will consist of a Curriculum Vitae (if you wish, a standard CV can be downloaded from the website: https: //www.ulb.be/fr/documents-officiels/emplois-academiques-et-scientifiques-cv-type) and a single pdf document including the following elements and that is structured as in the template available at this URL address

https://www.ulb.be/fr/documents-officiels/1e-applic-form-acad-tps-plein-docx.

This template organizes your application file to include the following elements:

an application letter;

- a maximum 7,000-character report (4 pages) presenting the applicant's research activities and a research project, including how these will integrate into ULB's research teams;
- a maximum 7,000-character report (4 pages) on the applicant's previous teaching activities and a
 teaching project for the first five years in this position; these must be relevant to the faculty and
 to the teaching profiles for the programs to which the applicant is to contribute;
- a maximum 7,000-character report (4 pages) note on the applicant's international achievements and projects;
- the names and e-mail addresses of five referees (taking into account gender balance) who may be contacted by those in charge of evaluating applications; these referees should not have conflicts of interest because of family or emotional ties.

Incomplete applications or applications that do not use the proposed format will not be examined by the selection committee.

The appointment to the academic staff of ULB is made at "Chargé de Cours intermédiaire" level and will become definitive after a probation period of 3 years. As of their appointment, members of academic staff are authorized to use the honorary title of "Professeur".

Where to go to apply?

Click here: https://jobs.ulb.be/job-invite/1689/?isInternalUser=true

For any connection problems or questions about our application, consult our FAQ : <u>e-recrut-mode-d-emploi-candidat-en-1734942996246-pdf</u>

Equal opportunities policy

ULB's personnel management policy is geared towards diversity and equal opportunities.

We recruit candidates on the basis of their skills, irrespective of age, gender, sexual orientation, origin, nationality, beliefs, disability, etc.

Would you like to be provided with reasonable adjustments in the selection procedure because of a disability, disorder, or illness? Please contact Marie Botty, the person in charge of diversity aspects for the academic and scientific staff (marie.botty@ulb.be). Be assured of the confidentiality of this information.

More details on the ULB gender and diversity policy are available at Diversity at ULB - ULB.

You will find all the regulations relating to academic careers on our site at http://www.ulb.ac.be/emploi/academique.html.