

Vacancy: PhD fellowship (4 years) in the domain of mathematical analysis

Vrije Universiteit Brussel (VUB) invites applications for a full-time PhD fellowship in the Department of Mathematics and Data Science.

The position is funded within the FWO research project *Microlocal analysis in quasianalytic classes and applications to quantum field theory on curved spacetimes*, supervised by Prof. A. Debrouwere and Prof. M. Wrochna. More information about the project is available via the VUB research portal: <https://researchportal.vub.be/en/projects/microlocal-analysis-in-quasianalytic-classes-and-applications-to-/>

More information about the Department of Mathematics and Data Science is available at: <https://wids.research.vub.be>

Research topic

The PhD project lies in mathematical analysis, with a focus on microlocal analysis, quasianalytic classes, partial differential equations, and applications to mathematical quantum field theory on curved spacetimes.

Your role

You will:

- conduct original research within the scope of the project under the supervision of the project supervisors;
- work towards a PhD thesis to be submitted and defended within the four-year fellowship period;
- participate actively in the international research community in the field, including seminars, workshops and conferences;
- contribute to the dissemination of results through publications and presentations;
- optionally contribute in a limited way to the department's teaching activities (not required, but much appreciated).

Your profile

The ideal candidate:

- holds, or will obtain before the start date, a Master's degree in mathematics or an equivalent degree that gives access to the doctoral programme at VUB;
- has a strong background in mathematical analysis at Master's level;
- has an interest in microlocal analysis, PDEs, quasianalytic classes and/or mathematical physics; prior background in these areas is a strong asset, but not required;
- has an excellent command of English, which is the working language of the project;
- is motivated to work in an international research environment and to develop into an independent researcher.

Knowledge of Dutch is not required.

Final-year Master's students are encouraged to apply, provided that they obtain their degree before the start of the fellowship.

What we offer

We offer:

- a full-time PhD fellowship for 4 years;
- an initial appointment of 1 year, renewable annually up to a maximum of 4 years subject to positive evaluation;
- a starting date between 01/09/2026 and 01/01/2027, ideally 01/10/2026;
- a doctoral scholarship according to the applicable Belgian/Flemish doctoral fellowship scale¹;
- a bench fee/travel budget to support participation in international conferences and other research-related activities;
- a stimulating and growing research environment in mathematical analysis and related areas at VUB;
- the opportunity to live and work in Brussels, an international and well-connected academic city.

How to apply

Please submit your application by email to Andreas.Debrouwere@vub.be and Michal.Wrochna@vub.be **no later than 01/06/2026**.

Please include:

- a motivation letter explaining your interest in the position, your background, and your possible starting date;
- an up-to-date CV;
- transcripts of your Bachelor's and Master's studies (if available);
- optionally, the contact details of one or two references.

Interviews (if invited) are expected to take place between 08/06/2026 and 24/07/2026.

Equal opportunities

VUB values diversity and encourages applications from all qualified candidates, regardless of gender, age, background, disability, or personal identity.

¹This corresponds to the net salary of a full time teaching assistant at university, including health care and social security. The salary is by law the same as the salaries offered by the research foundation itself for PhD fellows, see Chapter 8, Art. 32 of <https://www.fwo.be/en/support-programmes/regulations/phd-fellowship-fundamental-research/> and is 2.600 € net per month.