



Reference number: 130/2024

Doctoral/Postdoctoral Researcher (m/f/d) in microbial systems biophysics

Founded in 1409, Leipzig University is one of Germany's largest universities and a leader in research and medical training. With around 30,000 students and more than 5000 members of staff across 14 faculties, it is at the heart of the vibrant and outward-looking city of Leipzig. Leipzig University offers an innovative and international working environment as well as an exciting range of career opportunities in research, teaching, knowledge and technology transfer, infrastructure and administration.

The Faculty of Physics and Earth System Sciences seeks to fill the above position at the earliest opportunity.

The newly formed [Division of Quantitative Microbial Population Biology](#) led by Prof. Dr. Katja Taute is offering doctoral and postdoctoral positions starting as soon as possible. We are part of the [Peter Debye Institute for Soft Matter Physics](#), which hosts a diverse range of biophysics research. Active matter, including bacterial systems, is a growing key area of research at the Institute. Our group develops and uses biophysical methods, including high-throughput 3D tracking and microfluidics, in combination with theory and simulations, to quantitatively analyze the spatio-temporal dynamics of bacteria at the level of individuals and populations. We address the following questions:

- How do bacteria navigate complex environments such as those they encounter in nature?
- How does physics constrain the natural selection of bacterial navigation behaviors?
- How do individual behaviors shape global spatio-temporal population dynamics?
- How does individuality impact collective dynamics?

About the position

- Fixed term depending on planned academic training
- Depending on the qualification either 50 % of a full-time position for PhD candidates or 100 % of a full-time position for Postdocs
- Planned remuneration: salary group 13 TV-L

Duties

- Independent, original, experimental scientific research on a project designed together with the advisor
- own scientific additional qualification
- thorough documentation of research
- publication of research results, for example at conferences, workshops, or in scientific articles
- contributions to the Institute's teaching responsibilities (1-2 teaching hours per week for PhD candidates; and 4 teaching hours per week for Postdocs)

Requirements

- for PhD candidates and Postdocs: scientific higher education (e. g. Master of Science or comparable degree) in (bio-)physics, (bio-)engineering, (bio-)chemistry, or a related field
- for Postdocs: Doctoral degree in (bio-)physics, (bio-)engineering, (bio-)chemistry, or a related field
- very good command of at least one programming language (Matlab or Python preferred) and of scientific data analysis
- a track record of academic excellence (e. g. very good (final) grades in the course of study/doctorate, research or study scholarships and prizes, for Postdocs also: good scientific publications)
- experience with microscopy and scientific image processing is advantageous
- willingness to work in an S2 lab environment and a strong commitment to lab safety
- enthusiasm for quantitative experimental interdisciplinary science
- collaborative mindset and teamwork skills
- excellent verbal and written communication skills
- written and verbal professional fluency in the English language (at least level B2)

What we offer

- a professional English-language work environment at the leading edge of interdisciplinary science

- a modern workplace and attractive working conditions
- flexible working hours and work-life balance
- goal-oriented staff development throughout your working life, with opportunities for continuing professional development
- pension plan
- a discounted local public transport ticket (e.g. the Deutschlandticket as a job ticket)

Please submit the following documents with your application:

- a short letter of motivation (max. 1 page) in which you clearly explain why you would like to work in the research group,
- a scientific CV (evidence of creative and independent scientific work is an advantage)
- the names and contact information of two people who have agreed to provide academic references
- academic transcripts clearly listing the courses taken and grades achieved in their scientific (higher) education (Bachelor's and Master's degrees or comparable degrees)

Please send your application, quoting **reference number 130/2024**, to: **Leipzig University, Dean of the Faculty of Physics and Earth Science, Professor Dr. Marius Grundmann, Linnéstraße 5, 04103 Leipzig, Germany**, by 2 August 2024. You are also welcome to email your application as a single PDF file to **dekan@physik.uni-leipzig.de**. Please note that it is not possible to guarantee confidentiality and rule out unauthorised access by third parties when communicating by unencrypted email.

We kindly request that you submit copies only, as we are unable to return application documents. Interview expenses will not be reimbursed.

Inquiries regarding the position may be directed at [Prof. Dr. Katja Taute](#).

Leipzig University aims to increase the proportion of women in positions of responsibility and therefore expressly invites qualified women to apply. Severely disabled persons – or persons deemed legally equal to them under Book IX of the German Social Code – are encouraged to apply and will be given preference in the case of equal suitability.

Privacy information

If you choose to apply and send us your documents, you do so voluntarily. Any personal data contained within your application documents, or obtained during an interview, will be processed by Leipzig University – as the advertiser of the position – exclusively for the purposes of the selection process for the position advertised. It will not be passed on to third parties without your consent in the individual case. The legal basis for such data processing is Sect. 11 (1) of the Saxon Data Protection Implementation Act (SächsDSDG) in conjunction with the EU General Data Protection Regulation (GDPR). The controller for the application process within the meaning of the GDPR is the addressee of the application, specified in the advertisement. Your personal data will be stored for six months after the end of the recruitment process and then erased or destroyed in accordance with data protection regulations. You may refuse or withdraw your consent with effect for the future without giving reasons. In these cases, Leipzig University will not or no longer be able to process and consider your application. Under the GDPR, subject to the relevant statutory requirements you have the following rights vis-à-vis the addressee of the application with regard to your personal data: right of access (Art. 15 GDPR); right to rectification of inaccurate personal data (Art. 16 GDPR); right to erasure (Art. 17 GDPR); right to restriction of processing (Art. 18 GDPR); and right to object to processing (Art. 21 GDPR). If you have any questions, please contact the Data Protection Officer at Leipzig University (office: Augustusplatz 10, 04109 Leipzig). You also have the right to lodge a complaint with the Saxon Commissioner for Data Protection.