



Reference number 79/2024

Doctoral Researcher in Statistical Network Analysis (m/f/d)

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 Mathematics and Computer Science, Institute of Mathematics seeks to fill the above position at the earliest opportunity (no later than 1 November 2024).

The position is part of the DFG funded project "Network Inference: Nonparametric Estimation, Bootstrap, and Model Diagnostics in Sparse Graphon Models with Vertex Attributes" (jointly with Carsten Jentsch, TU Dortmund University). In the project we study non-parametric estimation in a graphon model for networks with vertex attributes. The goal is to apply the results to design a bootstrap method for such data. Ideally, we can apply this together with the group from TU Dortmund University to advance the causal inference on networks literature. The employment will be at Leipzig University, but the student will be part of the International Max Planck Research School "Mathematics in the Sciences" (IMPRS, <https://www.imprs-mis.mpg.de/home.html>). Please contact Alexander Kreiss (alexander.kreiss@math.uni-leipzig.de) for questions about the position or the application.

About the position

- Fixed term of 3 years
- 75 % of a full-time position
- Planned remuneration: salary group 13 TV-L

Duties

- studying non-parametric graphon estimation and related topics such as bootstrap for sparse networks with vertex attributes theoretically and empirically
- publish the established results and present them
- participate to the expected degree in the events offered by IMPRS
- supervising and supporting a supporting employee in building R-packages for the developed methodologies
- own scientific qualification (doctorate/PhD)

Requirements

- very good, completed master's degree (or equivalent) in Mathematics, Statistics, or a related subject with a good foundation in Mathematical Statistics and/or Probability Theory
- very good knowledge of the English language
- programming skills (preferably in R) are desirable
- ability and willingness to work on mathematical problems
- ability to work independently, and to exchange ideas and to cooperate with the other team members at Leipzig University and TU Dortmund University (this includes visiting Dortmund)
- scientific Curiosity

What we offer

- A modern workplace and attractive working conditions (mobile working)
- Flexible working hours and work-life balance
- A discounted local public transport ticket (e.g. the Deutschlandticket as a job ticket)

Please send your application with the usual documents (including contact details of a person who is willing to provide an academic reference), quoting **reference number 79/2024**, to: **Leipzig University, Dean of Faculty for Mathematics and Computer Science, Professor Bernd Kirchheim, Augustusplatz 10, 04109 Leipzig** by 22 May 2024. You are also welcome to email your application as a single PDF file to **fmi@math.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.

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.