

External Job Advertisement Reg. Nr. 5-4309/26-D

Modern, interconnected, conscious of tradition: Martin Luther University Halle-Wittenberg (MLU) is the oldest and largest university in the State of Saxony-Anhalt with a history dating back more than 500 years. Today more than 20,000 students are enrolled at the university. MLU's core research areas are in the nanosciences and biosciences, the Enlightenment, as well as in social and cultural research. The university is also home to a range of small disciplines, some of which can be found nowhere else in Germany. The university has excellent national and international ties, and works closely together with leading research institutes, industry, and more than 250 universities around the world.

The Faculty of Natural Science II, Institute of Mathematics, at Martin Luther University Halle-Wittenberg is seeking a part-time (75%)

Research Associate (m-f-d)

for a fixed term of 3 years, with the next possible starting date.

Remuneration will be determined based on job duties and responsibilities and will be aligned with the fulfillment of listed personal requirements, up to pay grade 13 under the *TV-L (Tarifvertrag für den Öffentlichen Dienst der Länder – 'German Public Service Pay Agreement for the Federal States')*.

We are seeking a highly qualified individual to work on research projects in the research group „Mathematical Systems Theory“. The group conducts intensive research on the control and regulation of dynamical systems. In particular, it focuses on nonlinear systems, networked systems, and partial differential equations that arise in the modeling of problems from applications such as multibody systems or autonomous driving. The position is located within the project „System-theoretic Methods for Sampling Stochastic Systems,“ which is funded by the German Research Foundation (DFG).

Job Responsibilities:

- Development of sampling methods using system-theoretic approaches
- Design of procedures for predicting expected values with Koopman operators
- Active participation and research within the Mathematical Systems Theory group
- Publication of research results in scientific journals, as well as presentation at national and international workshops and conferences

Opportunities for individual scientific qualification are provided.

Requirements:

- completed academic university degree (Master's or equivalent) in Mathematics or a closely related field
- Specialist knowledge in probability theory, especially in the area of stochastic differential equations
- preferable also expertise in at least one of the following areas: mathematical systems and control theory, mathematical foundations of machine learning, numerical methods for stochastic differential equations
- strong analytical and problem-solving skills, together with a high level of commitment and motivation
- good English language skills, both written and spoken
- good communication skills

We offer:

- interesting and varied fields of activity with creative freedom at the largest employer in the region
- the opportunity to support the education of young people through your work and to contribute to gaining new insights and answering important scientific research questions
- public service employment with remuneration according to the *Tarifvertrag der Länder (TV-L)* ('Collective Agreement for the Public Service') including an annual special payment and a company pension
- a secure job with attractive working conditions (home office, flexible working hours, and variable part-time models)
- 30 days of annual vacation plus additional days off on December 24 and 31
- a family-friendly, diversity-oriented, and intercultural work environment at a certified family-oriented university, including holiday childcare
- comprehensive staff development throughout all career stages with diverse training and qualification opportunities, including educational leave
- a health management framework to promote and maintain good health, as well as a broad university sports program
- the opportunity to participate in diverse social communities (e.g. university sports teams, university choir or university orchestra)
- exciting events such as the *Lange Nacht der Wissenschaften* (Long Night of the Sciences), University Information Day, and the University Winter Ball
- reduced-price meals in the cafeterias of the *Studentenwerk* (Student Services) Halle

Applications from disabled persons, including those of equal status (as certified by the *Bundesagentur für Arbeit* / Federal Employment Agency), will be given preferential consideration if they are equally suitable and qualified. Women are strongly encouraged to apply. Applications from individuals of all nationalities are explicitly welcome. Applicants with a degree that was not obtained at a German university must submit a Statement of Comparability for Foreign Higher Education Qualifications from the Central Office for Foreign Education (ZAB) (<https://www.kmk.org/zab/central-office-for-foreign-education>) as proof of equivalence upon conclusion of the employment contract. You can find ways to apply for a financial grant for this under: <https://www.anerkennung-in-deutschland.de/html/de/pro/anererkennungszuschuss.php#>.

If you have any organizational questions, please contact Prof. Dr. Thomas Berger, Tel.: 0345 55-24672, E-Mail: thomas.berger@mathematik.uni-halle.de.

Please send your application until 21/05/2026, including Reg. No.: 5-4309/26-D, with the required documents (Cover letter, curriculum vitae, master's thesis, and at least one letter of recommendation) to Martin Luther University Halle-Wittenberg, Prof. Dr. Thomas Berger, Arbeitsgruppe Mathematische Systemtheorie, Institut für Mathematik, Theodor-Lieser-Straße 5, 06120 Halle.

This job posting is subject to potential budgetary restrictions. Application costs will not be reimbursed by Martin Luther University. Application documents will only be returned if a sufficiently stamped envelope is enclosed. Electronic applications to thomas.berger@mathematik.uni-halle.de are welcome.