Reference number 102/2023
Scientific Researcher (m/f/d) in Earth System modelling and Data Science

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, Institute for Earth System Science and Remote Sensing, seeks to fill the above position at the earliest opportunity.

The newly formed group **"Land-Atmosphere Interactions"** aims to study the role of the biosphere in mediating carbon, water and energy exchanges between the atmosphere and the land surface, and the climate-biosphere feedbacks that arise from those interactions. Specific topics include the links between climate change, variability and extremes and vegetation dynamics, ecosystem disturbances and resilience, and impacts of land-use and management. We are seeking a motivated Scientific Programmer to support our team with expertise on coupled land-atmosphere or Earth System modelling and data-science.

About the position
- Fixed term depending on planned academic training (initially expected to be 3 years); a permanent continued employment is sought
- 100 % of a full-time position; a part-time position is possible
- Planned remuneration: salary group 13 TV-L

Duties
- own scientific qualification
- supporting the general programming activities of the team (scientific data processing, IT workflows, HPC optimization)
- supporting the team in model development and application, simulation design, error analysis and correction
- verification of new scientific model components for content, numerical and formal correctness, robustness and scalability
- development of workflows for the pre-processing of driver data, model simulation and post-processing of model results
- supporting the teaching activities of the team in programming and modelling
- contributing to publications by planning, conducting and analysing model experiments

Requirements
- scientific higher education (e. g. Master of Science or comparable degree) in computer science, informatics, bioinformatics, physics, meteorology, or comparable fields
- extensive experience with higher programming languages (FORTRAN, C++, …)
- sound knowledge and experience in the use of numerical analysis languages such as Julia, Python, as well as in the use of bash, cdo, nco and handling netcdf/hd5 files
- basic understanding of terrestrial biogeochemical cycles and biosphere-climate interactions;
- at least three years of practical experience in scientific programming and data processing as well as in the development and application of highly complex numerical models for the representation of dynamic systems
- experience in the use of high performance computing clusters, such as the system of the German Climate Computing Centre or comparable systems, including detailed knowledge of scripting languages in a Linux environment for process execution and automation
- ability to work independently as well as in a team
- very good written and spoken English

What we offer
- A modern workplace and attractive working conditions (mobile working)
- 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 send your application with the usual documents, quoting **reference number 102/2023**, to: **Leipzig University, Dean of the Faculty of Physics and Earth System Science, Professor Dr. Marius Grundmann, Linnéstraße 5, 04103 Leipzig, Germany** by 15 June 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.

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.