

The Ruhr area, one of Europe's largest metropolitan regions, offers attractive career opportunities for excellent scientists and scholars from around the world. In 2021, Ruhr University Bochum, TU Dortmund University and the University of Duisburg-Essen established the Research Alliance Ruhr to bundle their cutting-edge international research on the most urgent challenges facing humankind. There are four research centers and a college. This is just the latest chapter in our long-standing collaboration as the University Alliance Ruhr (UA Ruhr), a community of 14,000 researchers and 120,000 students in the heart of Germany.

The Environmetrics research group at the TU Dortmund offers a position within the Research Center Trustworthy Data Science and Security and the Department of Statistics as PhD Researcher. The position is to be filled as early as possible. Payment according to public service's agreement: TV-L E13 (75%, upgrade to 100% possible subject to availability of funds). Part-time employment or a reduction to part-time hours is generally possible.

PhD Position Environmetrics (3 years)

The Environmetrics group develops statistical methods for climate and environmental applications. The candidate will develop new statistical methods to infer spatio-temporal climate variability patterns from sparse observations, using latent Gaussian Markov Random Field (GMRF) models and incorporating physical constraints through the Stochastic Partial Differential Equation (SPDE) approach. Furthermore, the candidate will advance methods for distributional statistical postprocessing with copulas such that future Earth system projections are consistent with estimates from instrumental observations and natural climate archives. If you have a strong background in probability theory or statistics, are highly motivated to apply these skills to open questions in climate sciences, and strive to work on socially important questions about future environmental change, we are looking forward to your application.

YOUR RESPONSIBILITIES

- Interdisciplinary research in climate statistics, with a focus on spatio-temporal processes, distributional statistical postprocessing of simulator output, and applications to past and future climate variability
- Publication of scientific results in internationally recognized journals with peer-review
- Presentation of scientific results at international conferences
- Contributions to the supervision of student research assistants, and Bachelor's and Master's theses

YOUR QUALIFICATIONS

- Excellent degree (Master of Science or equivalent) in statistics, mathematics, data science, physics or related fields; candidates with an expected completion in the near future are encouraged to apply
- Strong background in probability theory, statistics, or stochastic analysis
- High proficiency in programming (R or Python, experience with Julia, C++, or Fortran will be considered an advantage)
- High proficiency in English, both written and spoken, for your scientific publications and presentations
- Experience with climate or environmental data will be considered an advantage
- Knowledge in climatology or environmental sciences will be considered an advantage

WHAT WE OFFER

- Work in an outstanding, internationally visible research environment
- Active supervision and promotion of your scientific development toward a doctoral degree
- A close integration of statistical theory and climate applications
- An interdisciplinary network of national and international collaborators
- Access to state-of-the-art research facilities and resources, including high performance compute clusters
- A collaborative and supportive research environment with an international, friendly, and dedicated team
- A balanced and family- friendly work-life relationship is important to us; thus, we offer options for flexible working times or part-time remote home-office.

RESEARCH ALLIANCE RUHR

The Research Alliance Ruhr is a joint undertaking of the three major universities in the Ruhr area and was initiated by the Ruhr Conference. The four research centers focus on "One Health Ruhr," "Chemical Sciences and Sustainability," "Trustworthy Data Science and Security," and "Future Energy Materials and Systems." In addition, the Research Alliance Ruhr has established a "College for Social Sciences and Humanities".

The Research Alliance Ruhr will appoint up to 50 research professors in the next few years and also offer numerous positions for research assistants. Join us now to create innovations for the world of tomorrow in Europe's densest university landscape, where you can find a wide range of scientific and industrial partners right on the doorstep.

YOUR APPLICATION

If you are interested in the position, please send your application (Ref-No. w05-26) until 12.03.2026 to:

**Research Center Trustworthy
Data Science and Security
Technische Universität Dortmund**

**JProf. Dr. Nils Weitzel
Joseph-von-Fraunhofer-Str. 25**

44227 Dortmund

environmetrics@rc-trust.ai

Please provide the usual documents: motivation letter, CV, copies of your certificates, a short summary of the Master's thesis (approx. 1 page), and contact details of two candidates who can provide a reference letter for you.

DIVERSITY

The TU Dortmund University promotes diversity and equal opportunities. Convince us with your personality and expertise.

Applications from women will be given preferential treatment in accordance with the legal regulations. It is pointed out that the application of suitable severely disabled persons is desired.

FURTHER INFORMATION

Further information about the Research Center can be found at:
<https://rc-trust.ai>

If you have any further questions, please contact JProf. Dr. Nils Weitzel:
environmetrics@rc-trust.ai