Count on us to make it count.

ZIB
ZUSE INSTITUTE BERLIN

December 10th, 2025

The Zuse Institute Berlin (ZIB) is a non-university research institute under public law of the State of Berlin. We conduct research and development in applied mathematics and computer science as well as the analysis and processing of complex data in conjunction with high-performance computing.

For the *Computational Humanities* research group, which is part of the department *Modeling and Simulation of Complex Processes*, we are offering a position, starting as soon as possible, for a

Researcher (f/m/d)

on a part-time basis (25 %, 9,85 hours per week), limited until December 31st, 2026. If the applicant meets the relevant wage requirements and personal qualifications, the salary will be based on remuneration group 13 TV-L of the pay scale for the German public sector.

The Project

For the BMBF-funded project EPISERVE - Epidemic Simulation and Data Service Platform, we are seeking a new member for our research team to work on models at the interface of epidemiology and opinion dynamics. Within EPISERVE you will contribute to

- Modeling the co-evolution of epidemic and opinion dynamics using social polls, social media and epidemic data, and
- Modeling health-behaviour related opinion formation and synchronization in small close-tie communities such as households and families.

The goal of these modules is to understand how public sentiment, risk perception and household decision processes interact with infection dynamics and non-pharmaceutical interventions, and to integrate these mechanisms into our agent-based simulation framework MATSim-EpiSim in collaboration with Wroclaw University of Science and Technology (WUST).

Working towards a PhD within this project is possible.

Your Tasks

- Contribution to EPISERVE and close cooperation with other project partners
- Development and analysis of mathematical and computational models for coupled epidemic–opinion dynamics with adaptive population changes
- Implementation of algorithms and simulations (e.g. agent-based, network and stochastic models)
- Visualization, interpretation and validation of the results, and preparation of publications and reports

Your Profile

- An above average Master's degree in Mathematics or a related field
- Solid background in mathematical modelling of dynamical systems, with experience in at least one of the following areas: spreading processes, opinion dynamics, network science, epidemiological modelling
- Strong programming skills in Python, Matlab or similar and hands-on experience in data analysis; experience in agent-based modelling, social network analysis
- Excellent communication skills (writing, speaking) and working proficiency in English; German language skills are an advantage but not mandatory
- Strong team player with affinity for interdisciplinary research and a focus on implementing concepts in practice; methodical and conceptual strength and creativity

We offer a friendly work environment with flexible work and meeting times, excellent equipment and a challenging professional environment

as well as

- an active onboarding process to provide new employees with the skills and knowledge that are important to their success in our institute and their careers,
- a varied, future-oriented and responsible field of activity,
- professional training opportunities and support in professional development,
- an additional pension scheme (VBL),
- 30 days annual leave, flexible working hours (flexitime),
- a salary based on TV-L (collective agreement for the public service of the federal states) in accordance with qualifications and professional experience with annual bonus payment,
- capital allowance of up to € 150 per month, or alternatively a BVG job ticket plus the remaining balance,
- the use of canteens and sports programs of the Freie Universität Berlin (FUB) at reduced rates.

Applicants with disabilities will be given preference if equally qualified. Female applicants are highly encouraged to apply, since women are under-represented in natural sciences and ZIB seeks to increase the proportion of women in this field.

Please send your application, **quoting the reference code WA 31/25**, including a cover letter containing a statement of your research interests, your CV and the standard supporting documents, by December 17th, 2025 (date of receipt) as one PDF file to jobs@zib.de.

Our private policy statement regarding application data is available at www.zib.de/impressum.

For further information on the area of responsibility, please contact Dr. Nataša Conrad (natasa.conrad@zib.de).

For further job offers please visit our website at www.zib.de/jobadvertisement.