



**Weierstrass Institute for Applied Analysis
and Stochastics
Leibniz Institute in Forschungsverbund Berlin e. V.**



The Weierstrass Institute for Applied Analysis and Stochastics (WIAS) is an institute of the Forschungsverbund Berlin e.V. (FVB). The FVB comprises seven non-university research institutes in Berlin which are funded by the federal and state governments. The research institutes belong to the Leibniz Association.

WIAS invites applications for a
PhD student position (f/m/d)
(Ref. 26/17)

in the Weierstrass Group “**Multi-species Balanced Laws**”
(Head: Dr. Katharina Hopf) to be filled **at the earliest possible date**.

This position offers the opportunity for independent scientific research aimed at advancing your own academic qualifications.

Field of work: Analysis of nonlinear partial differential equations.

The successful applicant will carry out research within the DFG-funded project “Degenerate cross-diffusion in constrained geometries (CrossGeo)”, led by Dr. Katharina Hopf. The project concerns the mathematical analysis of degenerate multicomponent diffusion systems with a variational origin, focusing in particular on boundary effects and geometric constraints. The successful candidate will analyse the mathematical structure of these systems, address fundamental questions of well-posedness, and develop suitable notions of weak and generalised solutions.

We are looking for: A motivated, outstanding candidate with a master’s degree in mathematics and a strong background in analysis and partial differential equations. Prior knowledge of nonlinear evolution equations, elliptic regularity and boundary value problems, or the calculus of variations is desirable.

What we offer:

- WIAS Berlin is a premier research institution known for its strength in partial differential equations, mathematical modeling, nonlinear optimization, and applied mathematics in general.
- Mobile working.
- A certified (Audit berufundfamilie) family-friendly work environment.
- Berlin is one of the most culture-rich and diverse international cities in the world. It offers endless opportunities to enjoy life outside work, while being very affordable compared to other major cities. Neither the job nor living in Berlin requires German language (although WIAS offers free German courses). We highly welcome international applications. Scientifically, Berlin offers a rich landscape with numerous opportunities for research, as well as job prospects in academia and industry.
- The successful candidate will receive careful mentorship both from the supervisor and from other peers through a dedicated mentorship program.



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Please direct scientific queries to Dr. Katharina Hopf (Katharina.Hopf@wias-berlin.de).

The appointment is limited to three years. The reduced work schedule is 29.25 hours per week, and the salary is according to the German TVöD Bund scale.

WIAS is committed to fostering diversity and equal opportunities and particularly encourages women to apply. Applicants with disabilities will be given preferential consideration in cases of equal qualification. If you have any questions or want to provide us with information related to diversity, inclusion or disabilities, please feel free to contact our Diversity Officer, Sara Krummenacher (sara.krummenacher@wias-berlin.de).

How to apply:

Please upload your complete application documents (motivation letter, detailed CV, certificates, list of MSc courses and grades, and a copy of the master's thesis or, if not yet completed, its current version) as soon as possible via our [applicant portal](#) using the button "Apply online". Applicants who have not yet completed their degree should indicate the expected completion date.

The application period opens immediately and remains open until the position is filled.

We are looking forward to your application!