



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. 24/02)

in the Research Group

“Nonsmooth Variational Problems and Operator Equations”

(Head: Prof. Dr. M. Hintermüller) to be filled at the earliest possible date.

Field of work: Distributed algorithms for physics-based large-scale equilibrium problems. Work tasks include:

- Studying systems in a game-theoretical context involving physical constraints taking the form of partial differential equations with uncertainties.
- Analyzing distributed stochastic models where agents do not share all information but need to find equilibrium strategies.
- Developing and implementing novel distributed algorithms to find equilibria computationally.

The chosen student will be part of the MATH+ Cluster of Excellence project AA4-13 “Equilibria for Distributed Multi-Modal Energy Systems under Uncertainty”.

Wanted: A motivated, outstanding student with a master’s degree in mathematics. A strong background in the theory and numerics of partial differential equations and a very good background in optimization and/or stochastic analysis is required.

What we offer:

- WIAS Berlin is a premier research institution known for its strength in optimization, optimal control, dynamical systems, and applied mathematics in general. It has hosted flagship conferences in mathematical optimization such as ICCOPT 2019.
- Payment according to the collective agreement for the public service (TVöD Bund) including the usual social benefits (30 vacation days in a 5-day week, company pension plan); subsidy for the company ticket for public transport
- 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 position is hosted in Research Group “Nonsmooth Variational Problems and Operator Equations”. The project is a collaboration between Prof. Dr. M. Hintermüller, Dr. C. Geiersbach, Dr. P. Dvurechensky in Research Group “Stochastic Algorithms and Nonparametric Statistics”, and Dr. A. Kannan at Humboldt University of Berlin.



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



Please direct scientific queries to Dr. C. Geiersbach (Caroline.Geiersbach@wias-berlin.de).

The position is limited to three years. The reduced work schedule is 29,25 hours per week, and the salary is according to the German TVoED Bund scale.

The Institute aims to increase the proportion of women in this field, so applications from women are particularly welcome. Among equally qualified applicants, disabled candidates will be given preference.

Please upload your complete application documents (motivation letter, detailed CV, certificates, list of MSc courses and grades, copy of the master thesis, reference letters, etc.) via our [applicant portal](#) using the button "[Apply online](#)".

The advertisement is open with immediate effect and will remain open until the position will be filled.

We are looking forward to your application!