At WIAS, people who are enthusiastic about mathematics are looking for clever solutions to complex problems.

Guest lectures by international researchers and presentations by WIAS scientists all over the world demonstrate the position of the Institute in the international research landscape. This intensive exchange proves the importance of its internationally renowned, cutting-edge research.

WIAS employs approximately 150 people, the majority of whom work in research.

We encourage our employees in their respective careers, for example, by

- providing a rich and varied scientific environment;
- generating career opportunities in academia, science, and industry or business;
- enabling interdisciplinary research and work on application problems in close cooperation with practitioners;
- making a satisfactory work/life balance including family responsibilities of its employees a management task at WIAS.

The Institute is also committed to an equal opportunity policy by, among others, continuously increasing the proportion of women on all levels. In recognition of its efforts in this direction WIAS has been repeatedly awarded the berufundfamilie (workandfamily) audit certificate.
The combination of methods from statistics, stochastics, partial differential equations, numerical mathematics and optimization allows, for example, the extraction of structures from very large unsorted data sets. It also makes possible reliable statements about a process even when the input data is subject to strong uncertainty. It enables the embedding of physics-based information into reconstruction problems in imaging science, and the identification and theoretical study of next generation materials.

Mathematics decisively contributes to innovation and social change and is of central importance for the development of key technologies.

The Institute contributes to solving some of the grand challenges currently faced by our society. These include the optimal and sustainable use of energy, advancing medical technology, identifying of new materials, and fostering technological innovation. This is reflected in the main areas of application:

- Conversion, Storage and Distribution of Energy
- Flow and Transport
- Materials Modeling
- Nano- and Optoelectronics
- Optimization and Control in Technology and Economy
- Quantitative Biomedicine

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The Institute conducts project-oriented mathematical research for the solution of complex application-driven problems in technology, science and business.

The research of the Institute tightly combines analysis and stochastics, and is done in close cooperation with partners from science and industry. This comprehensive approach represents one of the key strengths of the Institute.

The Institute has a strong focus on applied analysis and applied stochastics, on the mathematically consistent modeling of real-world phenomena as well as on the design and implementation of numerical algorithms and the development of scientific software.

Research at WIAS combines all of these areas, in the context of constant awareness of both social and ethical responsibilities.

The Weierstrass Institute for Applied Analysis and Stochastics (WIAS) is a leading European research institute located in the heart of Berlin.

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Our core competencies

A universal language

Solutions

for Complex Problems