



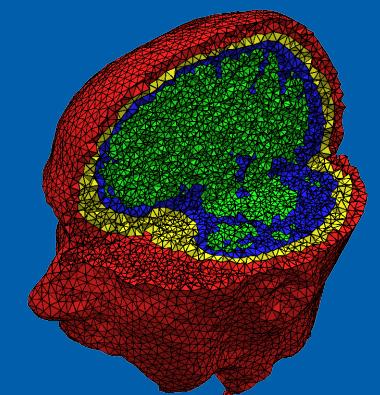
Intelligent solutions for complex problems



Weierstrass Institute for
Applied Analysis and Stochastics



Namen oder sonstige
Informationen



WIAS Survey

- founded in 1992
- formerly Karl Weierstrass Institute for Mathematics of the GDR's Academy of Sciences
- 156 employees, including 125 scientists (as at end of 2016)

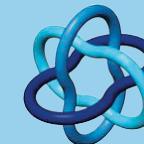


- WIAS: scientifically independent non-university research institute
- part of  **Forschungsverbund Berlin e.V.** (joint administration for eight institutes)

- WIAS is member of Leibniz Association
- Leibniz Association connects 91 research institutions that range in focus from the natural, engineering and environmental sciences via economics, spatial and social sciences to the humanities.
- WIAS coordinates a Leibniz-Network for Mathematical Modeling and Simulation



- WIAS hosts the secretariat of the International Mathematical Union (IMU) and the office of the German Mathematical Society (DMV)



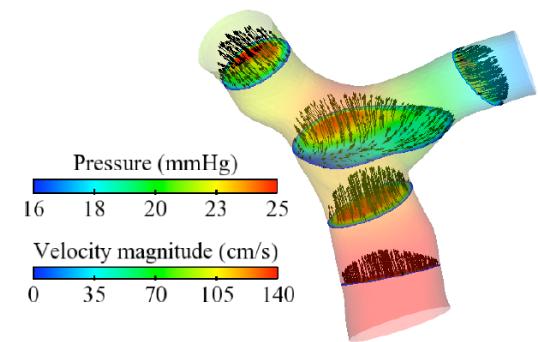
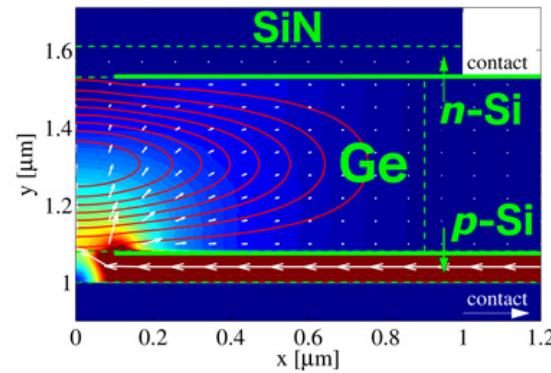
Scientific Mission of the Institute

Project-oriented research

Analysis

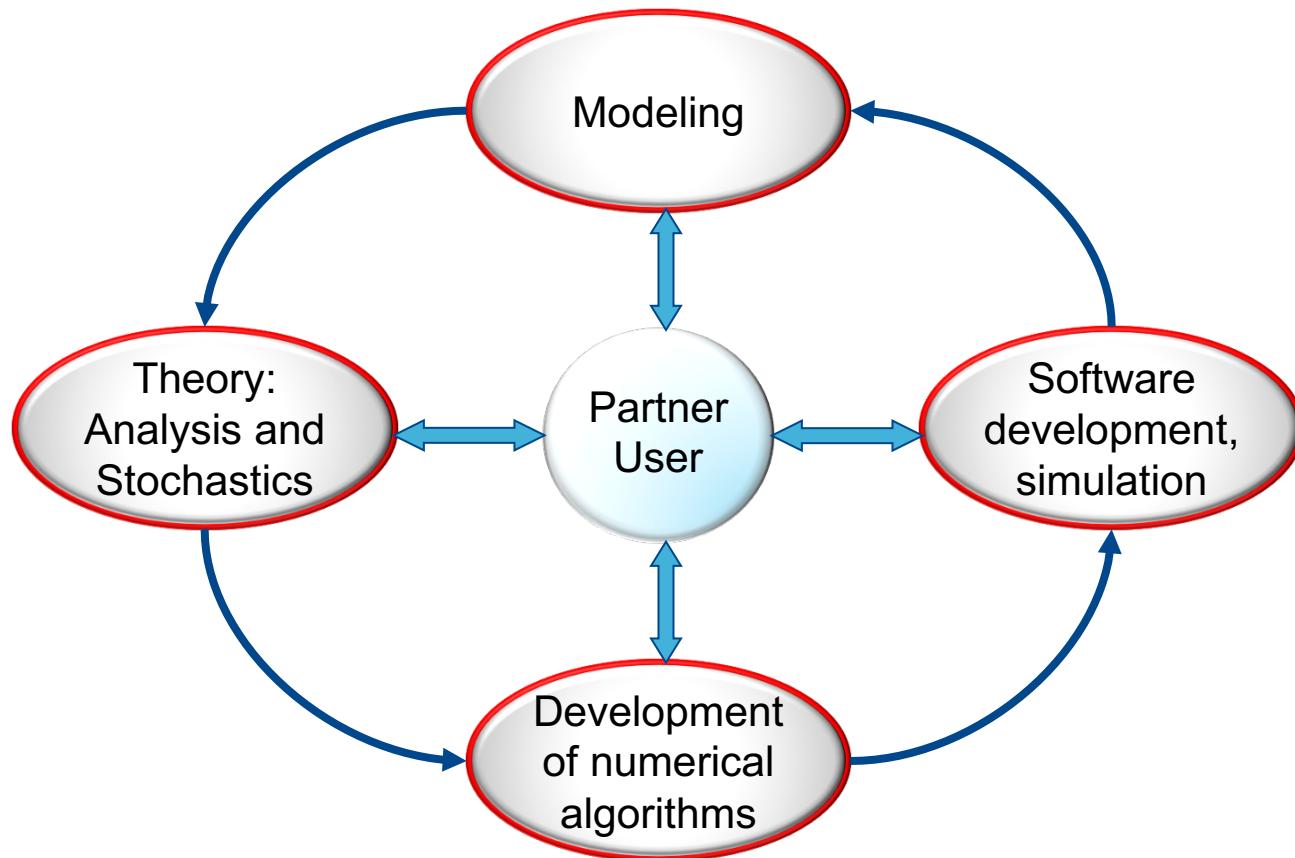
Stochastics

Aim: solution of **complex** problems
from economics, technical, and life sciences

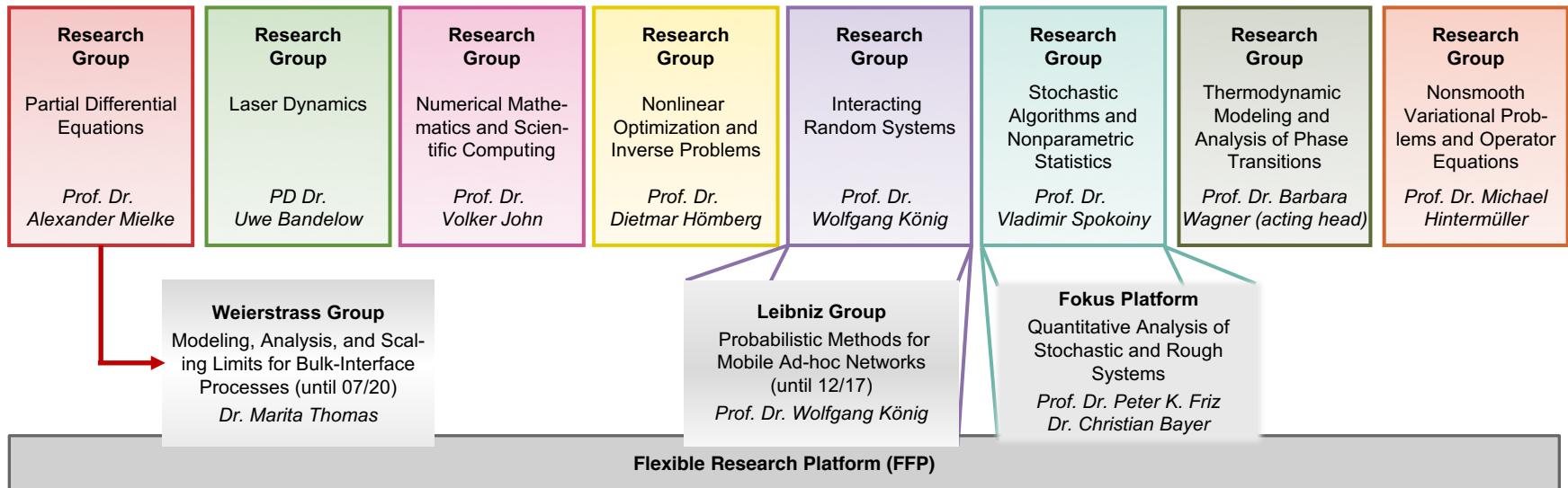


How the Institute Works

within und between disciplines

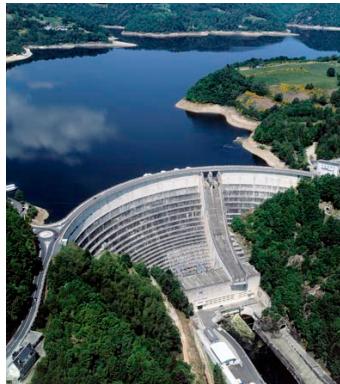


Scientific Structure

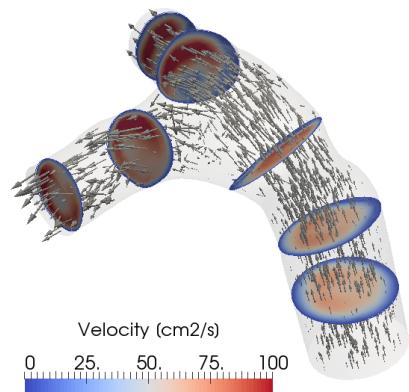


Main Application Areas

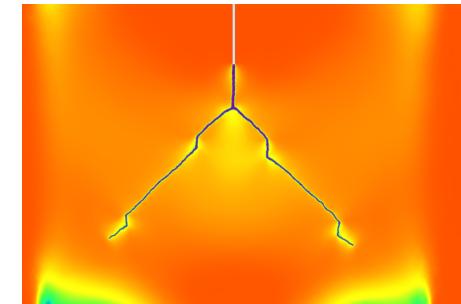
Conversion, storage and distribution of energy



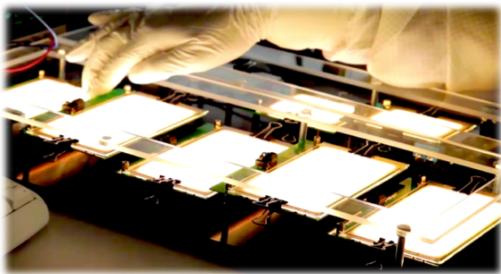
Flow and transport



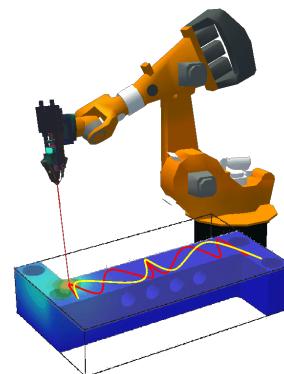
Materials modeling



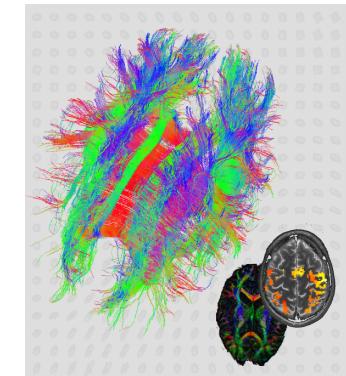
Nano- and Optoelectronics



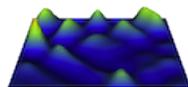
Optimization and control in technology and economy



Quantitative biomedicine



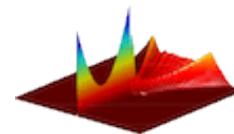
WIAS Software



ALEA



awc



BALaser



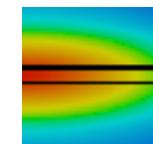
DiPoG



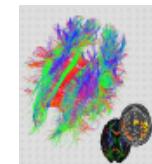
LDSL



MeFreSim



WIAS-TeSCA

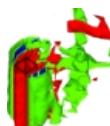


WIAS-R

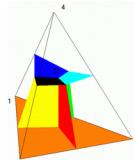


ddfermi
drift diffusion simulation tool

p ∂ elib



ParMooN



TetGen

Modern methods of MMS: methodic link between the sciences as well as economics, social and life science

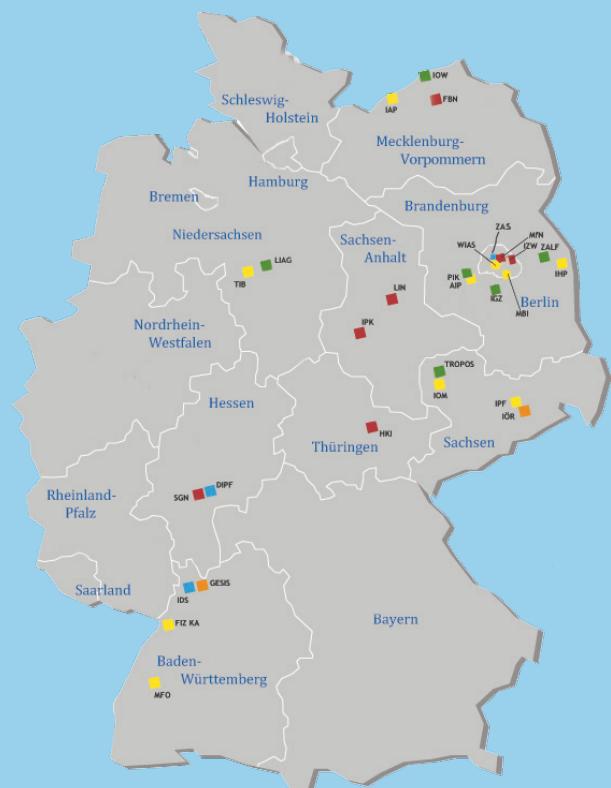
Networking and communication:

- Scientific cooperation: workshops, projects, fund raising
- Training: PhD students exchange, summer schools, mini courses
- Overall questions: research data, research software engineering, licensing



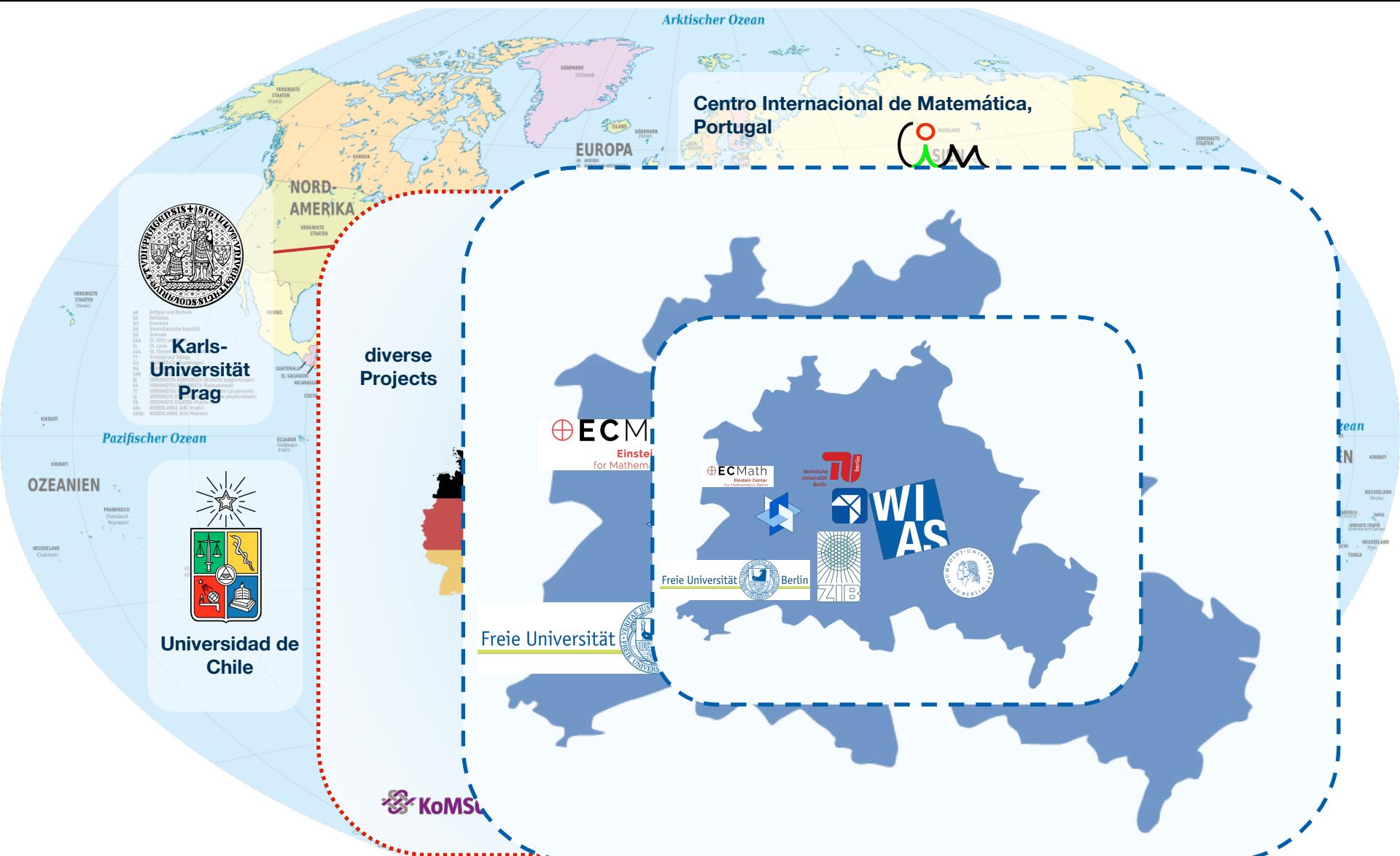
Coordinated by WIAS

Funded by strategy fund for networking within *Leibniz*



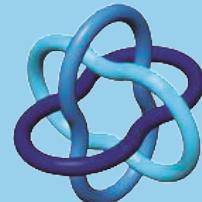
Currently 28 institutions (from all sections) involved

National / international Cooperations



IMU Secretariat at WIAS

- Established in February 2011
- Five additional positions at WIAS are dedicated to support the IMU (manager, IMCI-CDC admin., accountant, 0.5 IT, 0.5 archive)
- Supported by the German Federal Government and Federal State of Berlin
- Five offices, video and conference room, archive, lounge



Outreach

