



W1-Professorship “Sustainability and Usability of Simulation Software”

STUTTGART CENTRE FOR SIMULATION SCIENCE | AT THE EARLIEST CONVENIENCE

This junior professorship will be established at the University of Stuttgart through the DFG Cluster of Excellence EXC 2075 “Data-integrated Simulation Science (SimTech)”. It will be jointly appointed at the Stuttgart Center for Simulation Science (SC SimTech) and the Faculty of Computer Science, Information Technology and Electrical Engineering and linked closely to the group “Simulation of Large Systems”. The professorship is expected to represent the field Software Development in Scientific Computing in research and teaching, with a special focus on sustainability, maintainability, usability, efficiency and parallel scalability of numerical simulation software. Further aspects are testing and validation of simulation software, user and developer friendly documentation and configuration interfaces, and minimally invasive application programming interfaces. We look for applicants with substantial, internationally visible research contributions in the development of open source simulation software (libraries or frameworks) in at least one of the following areas:

- coupling software for multi-physics simulation on high performance computing systems
- grid frameworks for partial differential equations or particle simulation
- finite element frameworks for partial differential equations
- solver libraries for sparse nonlinear or linear systems of equations
- solver libraries for gradient based optimization and data assimilation

We expect the research to be integrated into the project networks of EXC SimTech. Active participation in further interdisciplinary projects of the university like in DFG-funded collaborative research centers or in the state-funded Cyber Valley Initiative is highly welcome. The visibility of the new research group should be advanced by actively raising third party funding both from public agencies as well as from the industrial environment of Stuttgart. The new professor will contribute to teaching in the Bachelor and Master programs in Computer Science and Simulation Science and with courses for students in other faculties.

In line with the Higher Education Act of the State of Baden-Württemberg (LHG §51) applicants are required to provide evidence of research qualification (usually by means of an excellent PhD dissertation) and teaching experience. Junior professors are appointed for four years, with a possible extension to six years after an evaluation.

Please submit your application before **24th April 2020** by email to jobs@simtech.uni-stuttgart.de with one PDF attachment comprising a curriculum vitae, academic degrees and certificates, full list of publications, research and teaching statements, three selected publications as well as the application form. Applications should be addressed to Prof. Dr. Thomas Ertl, Stuttgart Center of Simulation Science, University of Stuttgart, Pfaffenwaldring 5a, 70569 Stuttgart. Further information and the application form can be found here: <https://www.simtech.uni-stuttgart.de/karriere/jobs/>. Please be aware of the risks regarding confidentiality and the integrity of your application contents when sending your application via unencrypted email.

The University of Stuttgart has established a Dual Career Program to offer assistance to partners of those moving to Stuttgart. For more information, please visit: <https://www.uni-stuttgart.de/universitaet/arbeitgeber/dualcareer/>

Information on the collection of personal data in accordance with Article 13 of the GDPR can be found via the following link:
<https://www.uni-stuttgart.de/en/privacy-notice/job-application/>

