University of Stuttgart
Faculty of Aerospace Engineering and Geodesy

Professorship (W3) in „Aerodynamics of air and space vehicles“

INSTITUTE OF AERODYNAMICS AND GAS DYNAMICS | BY 01.04.2025

The University of Stuttgart is one of the leading technically oriented universities in Germany in one of Europe’s most vibrant high-tech and industrial areas. The university is a reliable employer, partner for technology transfer and is committed to the interdisciplinary integration of engineering, natural sciences, humanities, and social sciences based on the fundamentals of cutting-edge research at a disciplinary level.

The professorship represents the field of “Aerodynamics” in teaching and research. This includes in particular the analysis, design and optimization of aircraft and spacecraft, taking into account the specific challenges of compressible, unsteady flows, including flow-structure interaction. The professorship is intended to provide a link between fundamental approaches and modern interdisciplinary simulation and design methods and to further develop both experimental and numerical methods.

We are looking for a person who is internationally visible and recognized through high-ranking scientific publications or patents and who has sound knowledge and personal experience in the following key areas:

- Development and application of modern simulation methods for the analysis of flows in aerospace-relevant configurations as well as for their optimization and design
- Development and application of experimental methods in a wide range of Mach numbers

In addition, in-depth expertise in at least one of the following areas is desirable:

- Experimental and numerical aeroacoustics
- Aerodynamics of wind turbines
- Transonic, supersonic and hypersonic flows
- Methods for model reduction, multidisciplinary optimization, uncertainty quantification, high performance computing

Furthermore, didactic skills, the ability to coordinate and manage interdisciplinary research projects and experience in the associated acquisition of funding as well as active participation in academic self-administration are expected. In teaching, compulsory and advanced courses on fluid mechanics for engineers in the Bachelors and Masters degree programs in aerospace engineering with a special focus on applications in aerospace are to be held. In addition, elective lectures on simulation processes and experimental methods are expected.

For a qualitative assessment of your academic accomplishments, we kindly ask you to submit a short description of your three most important scientific achievements, which should be no longer than one page in total. Possible successes may include, for example, those in the fields of research, teaching, science and society, knowledge and technology transfer, inventions and patents, software development or spin-offs.

The requirements for employment listed in § 47 and § 50 Baden-Württemberg university law (LHG) apply.

Applications (incl. a teaching and research concept) and a completed application form (to be found at www.f06.uni-stuttgart.de/en/jobs) are requested by 20.05.2024, preferably in a single PDF file and by e-mail to dekanat@f06.uni-stuttgart.de. Alternatively, applications in paper form are also accepted to the chairperson of the appointment committee Prof. Dr.-Ing. Stefanos Fasoulas Faculty of Aerospace Engineering and Geodesy, University of Stuttgart, Pfaffenwaldring 27, 70569 Stuttgart. Please address any questions regarding the current appointment process to the chairperson.

The University of Stuttgart has established a Dual Career Program to offer assistance to partners of those moving to Stuttgart: uni-stuttgart.de/dual-career.

The University of Stuttgart is an equal opportunity employer. Applications from women are strongly encouraged. Disabled persons will be given preference in case of equal qualifications.

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