



## Tenure-Track-Professorship (W1) in Computational Structural Mechanics in Aerospace Engineering"

**INSTITUTE OF STRUCTURAL MECHANICS AND DYNAMICS IN AEROSPACE  
ENGINEERING | AT THE EARLIEST CONVENIENCE**

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 call for applications is aimed at young scientists with excellent track records who are in the early career phase. The person to be appointed should represent the field of computational structural mechanics in aerospace engineering in research and teaching.

Research is expected to focus on one or more of the following areas for the computational description of uni- to multifunctional materials and structures in aerospace (in alphabetical order):

- Data-integrated simulation, model reduction, and optimization
- Innovative and robust discretization methods in the Finite Element Method (FEM)
- Multi-disciplinary and multi-objective design optimization (MDO, MOO)
- Multi-scale and multi-physics analysis
- Uncertainty analysis in aerospace

Teaching should include theories and methods for numerical analysis of linear and nonlinear load-bearing behavior of structures on one or more of the following topics:

- Discretization methods in numerical mechanics such as the Finite Element Method (FEM) or Isogeometric Analysis (IGA)
- Optimization methods for lightweight aerospace structures
- Data-integrated simulation in solid and structural mechanics

We are searching for a personality who has demonstrated scientific competence in several of the above-mentioned fields and has profound knowledge and experience. Furthermore, collaboration with the "Stuttgart Center for Simulation Science" (SimTech) is desired. The willingness to actively participate in research networks of the faculty and the university, as well as (interdisciplinary) cooperation with other scientists is required. Taking over tasks in academic self-administration to an appropriate extent is expected.

The requirements for employment listed in § 51 Baden-Württemberg university law (LHG) apply. The advertised position is a tenure track position leading to an appointment as a W3 professor in case of a positive evaluation. For more information on the criteria of evaluation and quality management, please visit the website:

<https://www.uni-stuttgart.de/en/research/early-career-researchers/tenure-track-professorship/>

Written applications with the usual documents (including curriculum vitae, diplomas, certificates, teaching and research concept, list of publications and invited lectures, list of the amount and type of third-party funds raised, teaching experience and a maximum one-page description of your three most important scientific achievements) as well as a completed short application form to be found via <https://www.f06.uni-stuttgart.de/en/jobs/> are requested by **28.02.2023** in electronic form (preferably as a single PDF file) to: **dekanat@f06.uni-stuttgart.de**. Postal address of the chairman of the appointment committee: **Prof. Peter Middendorf, c/o Dekanat Fakultät 6, Pfaffenwaldring 27, 70569 Stuttgart, Germany**. Please be aware of the risks regarding confidentiality and the integrity of your application contents when sending your application via unencrypted e-mail.

The University of Stuttgart has established a Dual Career Program to offer assistance to partners of those moving to Stuttgart:

<https://www.uni-stuttgart.de/dual-career-en>

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>

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