

The University of Konstanz is one of eleven Universities of Excellence in Germany. Since 2007 it has been successful in the German Excellence Initiative and its follow-up program, the Excellence Strategy.

The working group Numerical Optimization of the Department of Mathematics and Statistics at the University of Konstanz offers a three-years

**Doctoral Position (part-time 75%, E 13 TV-L)**  
or  
**Postdoctoral Position (full-time 100%, E 13 TV-L)**

within the third-party project *Thermal digital Twinning AND Fast CFD for CHT problems – TITAN* financed by the Austrian research center Virtual Vehicle Research GmbH (see <https://www.virtual-vehicle.at>). The hiring process should be started as quickly as possible.

The research in the project TITAN will focus on reduced-order models for conjugate heat transfer simulations, where the coupling of transient fluid flow and solid heat conduction is described by systems of partial differential equations. Together with the Virtual Vehicle a certified and reduced-order scheme should be developed and implemented efficiently for real application cases. In particular, research stays at the Virtual Vehicle will be made possible.

A low teaching commitment to teaching (PhD: one hour per week; Postdoc: 2 hours per week) is included in the present doctoral position. Here, the support of lectures given by the working group Numerical Optimization is needed.

Applicants should have an excellent Master of Science Mathematics or Applied Mathematics. In particular, knowledge in the analysis and implementation of numerical methods for partial differential equations (e.g., by utilizing Galerkin-based methods) is required. Preferred additional knowledge is desired in reduced-order modeling.

The University of Konstanz is committed to ensuring an environment that provides equal opportunities and promotes diversity, as well as a good balance between university and family life. As an equal opportunity employer, we strive to increase the number of women working in research and teaching. We also support working couples through our dual career program.

Interested applicants please contact Prof. Dr. Stefan Volkwein (E-mail: [Stefan.Volkwein@uni-konstanz.de](mailto:Stefan.Volkwein@uni-konstanz.de)) by sending a curriculum vitae and a motivation letter.