Tenure-track Professorship (W1) „Data-driven methods for partial differential equations“

Organizational unit

Division V - Physics and Mathematics, Institute for Applied and Numerical Mathematics (IANM), KIT Department of Mathematics

Job description

We are looking for an individual who is internationally recognized in the field of data-driven numerical methods for partial differential equations. Areas of work include the development and analysis of deep learning methods for high-dimensional PDE problems, of deep operator networks for learning the data-to-solution map of PDEs, of physics-informed neural networks or of data-driven optimization tasks with PDE constraints.

As part of the tenure-track professorship, you will participate in the research focus "Partial Differential Equations" and, if possible, in the Collaborative Research Center 1173 "Wave Phenomena" at the KIT Faculty of Mathematics. In addition, we expect your interdisciplinary cooperation within the KIT Center "Mathematics in Sciences, Engineering, and Economics" (MathSEE).

You will lead your own research group and partic-

Starting date

1. Oktober 2024 / October 1, 2024

Personal qualification

Employment is subject to Art. 14, par. (2) of the KIT Act in conjunction with Art. 51 LHG Baden-Württemberg (Act of Baden-Württemberg on Universities and Colleges) as well as to the Quality Assurance Concept for Junior Professorships and Tenure-track Professorships at Karlsruhe Institute of Technology (KIT (https://www.sts.kit.edu/downloads/20_06_29_%20Quality%20Assurance%20Concept%20for%20Tenure-track%20or%20Junior%20Professorship.pdf)).

Bitte geben Sie auf englisch die gewünschten persönlichen Qualifikationen für diese Position ein.
ipate in academic self-governance.

In teaching you will represent the field of "Numerical Mathematics". Your teaching obligation will be 4 hours per week per semester before and 6 hours per week per semester after positive midterm evaluation. In case of your promotion to a full professorship (W3), you will participate in the service teaching of the institute.

Contract duration

Employment is limited to six years as a civil servant for a fixed term or as a salaried employee. Before the expiry of the third year of work, an interim evaluation will take place. The evaluation procedure and evaluation criteria are outlined in the Quality Assurance Concept for Junior Professorships and Tenure-track Professorships at Karlsruhe Institute of Technology. Specific interim and final evaluation criteria will include your own internationally visible contributions to the research field (publications and talks), internal and external cooperations, active participation in the research focus "Partial Differential Equations", in the KIT Center MathSEE and, if possible, in the CRC 1173, acquisition of third-party funding, (co-)organization of conferences, workshops and summer schools, scope and quality of teaching, supervision of junior researchers and students as well as German language skills (approx. level B2 and C1 at midterm and final evaluation, respectively). A support process and mentoring are provided for career development.

In case of a positive final evaluation, you will be offered a full professorship (W3).

Application up to

April 1, 2024

Contact person in line-management

For further information, please contact Prof. Dr. Tobias Jahnke (mailto:tobias.jahnke@kit.edu), phone +49 (0)721 608-47982.

Application

Your application should include a curriculum vitae with a description of your professional career, diplomas/certificates, a list of publications, links to electronic versions of the five most important publications, acquired third-party funds if applicable, a description of previous and planned research and teaching activities, and teaching evaluations.

Please send these documents to Karlsruhe Institute of Technology (KIT), Division V, Head of Division...
Prof. Dr. Marc Weber, 76131 Karlsruhe, Germany, preferably as a single PDF file, per email to bewerbungenw1@math.kit.edu.

Vacancy number: 1088/2024

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job.

Recognized severely disabled persons will be preferred if they are equally qualified.

As a family-friendly university, KIT offers part-time employment, leaves of absence, a dual career service, and coaching to support the work-life balance.

Your personal data will be processed by KIT in accordance with this privacy policy (https://www.sts.kit.edu/downloads/2020-11-17_DSE_Berufungsverfahren_englisch.pdf).