KATHOLISCHE UNIVERSITÄT EICHSTÄTT-INGOLSTADT

The Catholic University of Eichstätt-Ingolstadt (KU) is a non-state university under church leadership and officially recognized by the Free State of Bavaria. It is committed to strong research and excellent teaching and combines first-class study conditions with an international focus. Eight faculties offer a wide range of subjects for around 5,000 students. The University employs 900 people of different faiths and beliefs. Grounded in the Christian view of human life, the KU aims to create an academic and educational culture of responsibility.

The Chair of Applied Mathematics within the Mathematical Institute for Machine Learning and Data Science (MIDS) at KU Eichstätt-Ingolstadt invites applications for part-time positions (75 %) for

Two Doctoral Candidates in Applied Mathematics (Fluid Dynamics/Scientific Computing/Approximation Theory) (m/f/d)

to be filled from the earliest possible starting date. The place of work will be Ingolstadt. Successful candidates will be employed in a private-law employment relationship, in which case remuneration will be according to pay grade E 13 TV-L provided that the requirements are met.

The position is funded by and shall contribute to the Collaborative Research Center TRR 181 „Energy Transfers in Atmosphere and Ocean“ for a duration of up to four years parallel to approved German Research Foundation funding periods. TRR 181 is a collaborative project between Universität Hamburg, Universität Bremen, KU Eichstätt-Ingolstadt, the Alfred-Wegener-Institut Bremerhaven, the GEOMAR Helmholtz Centre for Ocean Research Kiel, and several other partner institutes.

Physical oceanographers, meteorologists, and applied mathematicians are working together in the project

- to understand the energy transfers between the different dynamical regimes – small-scale turbulence, internal gravity waves, and geostrophically balanced motion – in both atmosphere and ocean,
- to develop, to test, and to implement new and consistent parameterisations in models, and
- to develop mathematical and numerical methods featuring consistent energetics.

The goal are energetically more consistent climate models for advanced climate predictions.

Your tasks

- Scientific contributions toward work package 3 on „Structural Properties of Momentum Closures“ in subproject M3 „Toward Consistent Subgrid Momentum Closures“ (supervised by Prof. Dr. M. Oliver) or
- Scientific contributions toward work package 4 on „Scale Analysis and Non-isotropic Modeling on the Sphere“ in subproject M3 „Toward Consistent Subgrid Momentum Closures“ (supervised by Dr. J. Jäger)
- Contributions toward the overall goals of subproject M3 and the TRR 181 at large
- Participation in the research activities of the group

Your profile

- Excellent Master degree in one of the relevant areas of applied mathematics
- Ability to work in a team
- Flexibility and willingness to travel
- German language skills are not required, but candidates are encouraged to develop those during their employment at the KU

Our offer

- Successful applicants will become members of the Research Training Group „ENERGY“ associated with the TRR 181 and have the opportunity to complete a PhD degree at KU Eichstätt-Ingolstadt
- Entrainment into a vibrant interdisciplinary collaborative research network
- Team-oriented and well-equipped work environment in central Ingolstadt
- Opportunity and support for career development

Your application

Please send your application with the usual supporting documents by e-mail to Prof. Dr. Marcel Oliver (marcel.oliver@ku.de). Please combine all documents in one PDF file. Applications received by July 07, 2024 will receive full consideration. Your documents should include cover letter, curriculum vitae, copies of transcripts and degree certificates and at least one letter of recommendation.

All application documents submitted will be destroyed/deleted after completion of the hiring process in compliance with data protection regulations.
Please note the KU's privacy policy for the application process. Corresponding information can be downloaded from the KU website at https://www.ku.de/en/the-ku/job-offers. By submitting your application, you confirm that you have taken note of the data protection information and the privacy policy.

All employees are obliged to acknowledge the nature and mission of the KU as stipulated in its Mission Statement and Foundation Charter. The University is therefore interested in receiving applications with relevant information in this regard. There are no specific denominational requirements for being employed at the KU.

The KU is committed to promoting equal opportunity (m/w/d), and aims to ensure that its members are able to balance work and family life. Candidates with severe disabilities (m/w/d) who are equally suitable to other applicants will be prioritized.