



The University of Klagenfurt is pleased to announce the following open positions:

3 PreDoc positions (all genders welcome)

within the **doc.funds doctoral school**

Modeling – Analysis – Optimization of discrete, continuous, and stochastic systems

The doctoral school is embedded within the well-established doctoral programme in mathematics at the University of Klagenfurt. It provides a vivid, friendly, and research-oriented environment. In our research we aim to solve mathematical problems by creating synergies from a multi-perspective view, combining the knowledge of several mathematical sub-disciplines. Further information on the doctoral programme and the doc.funds doctoral school can be found here: <http://www.math.aau.at/doctoralschool>

The **University of Klagenfurt** is a young and innovative university at the intersection of three cultures. Since its foundation in the year 1970, it has established itself as the leading academic educational institution in the region, and as a hub for the acquisition, exchange, and transfer of knowledge across the entire Alps-Adriatic Region.

Future-oriented degree programmes, outstanding achievements in teaching and research, numerous co-operations at home and abroad, ideal conditions for the advancement of young researchers and a one-of-a-kind campus nestled between a Renaissance city and Lake Wörthersee give the university its distinctive character.

Around 12,000 students pursue their studies and research on the campus, including around 2,000 from 100 different nations across the globe.

Our offer

The successful candidates will be employed at the Faculty of Technical Sciences, **Departments for Mathematics and Statistics**. The 3 positions are 75 % (30 hours/week) part-time positions, limited to 4 years (Uni-KV: B1, www.jobs.aau.at/en/faq/). The monthly gross salary is € 2,196.80, paid 14 times per year, and can be increased to a maximum of € 2,604.30 by taking previous experience into account. The starting date is negotiable: August, 1, 2021 at the latest, preferably **February 1, 2021**.

Tasks and responsibilities

- Autonomous scientific work including the publication of research articles in one or more of the following fields: discrete optimization, regularization methods, dynamical systems
- Active participation in the research activities of the doctoral school and at international conferences
- International research stay (fully funded)

The successful candidate is expected to pursue a PhD within the doctoral programme and the doc.funds doctoral school Modeling – Analysis – Optimization at the University of Klagenfurt.

Required qualification

- Master's degree at a national or international university in mathematics or a related field. This requirement must be fulfilled **two weeks before the starting date** at the latest; hence, the last possible deadline for meeting this requirement is July 16, 2021.
- strong background in one or more of the following or related fields: discrete optimization, regularization methods, dynamical systems
- An interest in multi-perspective research combining different mathematical sub-disciplines
- Programming skills (e.g., Python, Matlab, R, SageMath, Maple, Mathematica, C/C++, ...)



- Fluency in English

Desired qualifications

- Ability to work in a team
- High communication and dissemination skills

Every PhD student will have one of our faculty members (of whom 45% are female) as supervisor and they will have a co-supervisor and an international mentor on their side.

The principles of diversity, gender mainstreaming, healthiness, sustainability, and compatibility of family and career build the basis for the achievement of our goals. Hence, all our PhD students will have access to the university's career development programme, including a special offer for female students.

It is our declared goal to increase the proportion of women in scientific positions and therefore we encourage qualified women to apply for the position. In case of equivalent qualification, women are given preferential consideration.

People with disabilities or chronic diseases who fulfill the requirements are particularly encouraged to apply.

General information for applicants is available on www.aau.at/en/jobs/information. For further information, please contact the coordinator of the doctoral school, Univ.-Prof. Dr. Michaela Szölgényi (michaela.szoelgyenyi@aau.at).

We welcome applications comprising a curriculum vitae, an abstract of max. ½ page (including a statement of interest in multi-perspective research combining different mathematical sub-disciplines and a statement indicating which of the research areas of the doctoral school would be preferred for the PhD), list of courses taken so far and official transcript for both Bachelor and Master studies, title/topic of Master's thesis, Master's thesis if available.

If an applicant has not received the Master's degree by the application deadline, the applicant should provide a declaration, written either by a supervisor or by the candidate themselves, on the feasibility of finishing the Master's degree by July 16, 2021 at the latest.

Applications must be submitted online **no later than November 11, 2020** via the job portal jobs.aau.at/en/ in the category "Scientific Staff" by pressing the button "Show vacancies", indicating **reference code 590/20** and selecting "Apply for this position".

In addition, a confidential letter of reference by a university lecturer needs to be sent by the university lecturer themselves to mao.doctoralschool@aau.at. The deadline for the reference letter is: **November 11, 2020**.

We can only accept applications submitted before the deadline and comprising all necessary documents.

Translations into other languages serve informational purposes only. Solely the version advertised in the University Bulletin (Mitteilungsblatt) shall be legally binding.