Internship program for female researchers
Women in Mathematics of Data

FAU Research Center for Mathematics of Data | MoD
Friedrich-Alexander-Universität Erlangen-Nürnberg

Context/Background

The recently established FAU Research Center for Mathematics of Data (MoD) of the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) in Germany, is offering one semester internship positions for female researchers in the broad field of Mathematical and Data Sciences and applications.

FAU MoD combines the expertise and experience of researchers from FAU faculties, the Max-Planck-Zentrum für Physik und Medizin, the ADA Lovelace Center at Fraunhofer IIS and, more generally, of the perimeter of FAU, to tackle the great challenge of developing the mathematics allowing to empower data. This constitutes a unique interdisciplinary alliance for academic cooperation and a multidisciplinary environment for training young researchers in this emerging and rapidly evolving field. FAU MoD optimally combines the skills in Applied Mathematics, Scientific Computing, Artificial Intelligence and Data Science to address the challenges arising in a broad range of research disciplines and various innovative industrial sectors.

Mathematical and Data Sciences with Applications

We are welcoming applications by young and highly motivated female scientists to contribute to MoD. Possible research projects in Mathematical and Data Sciences and applications include, but are not limited to:

- Stochastic gradient methods for mechanical design problems with uncertain data
- Data-driven methods for ultra-large dimensional mechanical system simulation
- Data-driven microstructure-mechanics relation in biological tissues
- Predicting gait using stochastic trajectory optimization
- Mathematics of active materials from development to biofilms
- Optimized digital health pathways for chronic diseases
- Global decentral carbon markets – technological and economic challenges
- Automated analysis of Chinese algorithmic mathematical texts

More information about the members and their research areas can be found on https://mod.fau.eu/.

Searched Profile and Application Form

Applications are welcome from highly motivated female

- Master students
- PhD candidates
- PostDocs
- Researchers on sabbatical

The applications including cover letter, curriculum vitae, list of publications and a short research plan should be submitted via e-mail as a single pdf file. Recommendation letters are welcome but not necessary. The application documents as well as inquiries about the positions should be sent to MoD Manager Dr. Michael Schuster (michi.schuster@fau.de). Please refer to "**Application MoD Internship**" in the reference line of the email. Applications will be accepted until the positions are filled.

It is also welcome but not necessary if the applicant contact possible supervisors in advance. For Master students a statement of research interests can be added instead of a research plan.

Offer

FAU MoD is offering one semester internship positions for female researchers in the broad field of Mathematical and Data Sciences and applications. The researchers will immediately be incorporated into the organization. The FAU MoD will offer a lively research environment within a large and interactive team.

In consideration of the underrepresentation of women and the gender equality deficit in senior research positions, MoD will encourage and support young female researchers to pursue an academic career and will ensure a family-friendly research and working environment.

For more detailed information about the group and the research areas please visit: https://mod.fau.eu/

For further information about the position, please contact current MoD Manager Dr. Michael Schuster (michi.schuster@fau.de, https://mod.fau.eu/michael-schuster/).