We are a PhD position in statistical methods for Big Data at the Scientific Computing Center (SCC) of the Karlsruhe Institute of Technology (KIT).

The PhD student will be supervised by Dr. Nadja Klein. More information about the research group can be found at https://www.kleinlab.de/.

In this project, you will:

- Develop novel Bayesian deep learning methods for structured additive regression models with multivariate responses and complex dependency structures.
- Implement these methods in efficient software, ideally as open-source packages.
- Investigate the theoretical properties of the proposed methods.
- Contribute to joint research within the group and collaborations.
- Publish your results in leading journals and present them at conferences.

Qualifications and requirements:

- A completed Master's degree in statistics, mathematics, computer science, or a related field, with excellent grades.
- Solid mathematical skills.
- Experience with Bayesian statistics and its computational methods.
- Strong programming skills in at least one scientific computing language (e.g., Python, R, Julia, C++).
- Experience with at least one of the following areas: deep learning, time series, spatial data), copula modelling, change point detection, or theoretical analysis of Bayesian models.
- Excellent written and spoken English.
- A strong interest in research, together with the ability to work independently and in a team.

To apply, please e-mail a single PDF containing your CV, a brief statement of research interests, contact details of two references, and relevant transcripts to nadja.klein@kit.edu. Applications will be considered on a rolling basis until the position is filled. Only shortlisted candidates will be contacted.