



GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

The Collaborative Research Center (CRC) 1456 Mathematics of Experiment: The challenge of indirect measurements in the natural sciences at the Georg-August-University Göttingen offers a

PhD position (f/m/d).

The position should be filled as soon as possible (e.g. September 01, 2021). The salary is in accordance with the German public service salary scale (E13 TV-L). The position is offered with 75% of the regular working hours with a limited contract for three years.

The PhD student will work on the project C06 “Optimal transport based colocalization” in the research group of Bernhard Schmitzer. The project studies biological cells and their conjectured ability to regulate their metabolic activity by the dynamic assembly of the involved proteins. Protein distributions in individual cells will be measured with state-of-the-art super-resolution microscopy. The measurements will then be analyzed with optimal transport theory to determine the extent of coordination by the cell. The candidate will contribute to the mathematical modelling and efficient numerical implementation.

About us:

The aim of CRC 1456 is to develop mathematical data analysis for the natural sciences, i.e. mathematical theory and tools to efficiently extract maximal quantitative information from experimental data. This challenge is addressed in 16 projects which are all lead jointly by mathematicians and experimental scientists. For more information we refer to the web page <https://www.uni-goettingen.de/crc1456>

Your profile

- **M.Sc. degree** (or equivalent) in mathematics, computer science or physics
- Experience with **numerical optimization and scientific computing** environments such as Python, Matlab or similar
- **Interested to work in an interdisciplinary team** with an experimental lab
- Fully proficient in written and spoken **English**

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply in fields in which they are underrepresented. The university has committed itself to being a family-friendly institution and supports their employees in balancing work and family life. The mission of the University is to employ a greater number of severely disabled persons. Applications from severely disabled persons with equivalent qualifications will be given preference.

Your application including also a **curriculum vitae, copies of your certificates and contact information of at least two references** should be submitted to the online application platform https://lotus2.gwdg.de/uni/uzdv/perso/knr_100875.nsf at the earliest convenience by 22.07.2021. We will perform a continuous evaluation of incoming applications. If you have any questions, please contact **Bernhard Schmitzer** via e-mail (schmitzer@cs.uni-goettingen.de).

Please note:

With submission of your application, you accept the processing of your applicant data in terms of data-protection law. Further information on the legal basis and data usage is provided in the [Information General Data Protection Regulation \(GDPR\)](#).

