



GEORG-AUGUST-UNIVERSITÄT
GÖTTINGEN

The Research Training Group RTG 2088 „Discovering Structure in Complex Data: Statistics meets Optimization and Inverse Problems“ (Speaker: Prof. Gerlind Plonka-Hoch) at the Georg-August-University Göttingen offers

2 Ph.D. positions

for project B1 „Inverse Problems in Exponential Families: Likelihood Data Fidelities“ and project B4 „Selection of Tuning Parameters in Penalized Estimation“ from February 1, 2019 to January 31, 2022. The salary is in accordance with the German public service salary scale (E13 TV-L) with 75% of the regular working hours (currently 29.85 hours per week).

The research projects in this RTG focus on new mathematical concepts for the efficient reconstruction and classification of relevant structural information in data sets, without reconstructing the entire information inherent in the data. One of the guiding principles of this RTG consists of discovering and rigorously exploiting structural a priori information in order to obtain the desired information. Methodologically, specific emphasis will be laid upon the interplay between approaches in statistics, optimization and inverse problems. Most of the proposed PhD projects arise from signal or image processing applications in biology, medicine or engineering.

Requirements:

- A very good M.Sc.degree (or equivalent) in mathematics or a similar field;
- A strong background in one of the mathematical disciplines covered by the RTG (inverse problems, optimization, mathematical statistics, data analysis, probability theory, computational topology, mathematical signal and image processing);
- Proficiency in written and spoken English;
- Good programming skills are beneficial.

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.



Detailed information about the RTG are available at <http://www.uni-goettingen.de/de/514290.html>.

Please apply through e-mail to Prof. Dr. Gerlind Plonka-Hoch (plonka@math.uni-goettingen.de). Closing date is **November 16th, 2018**. For further information please contact Prof. Plonka-Hoch.