



Job Announcement CRC 755 “Nanoscale Photonic Imaging”



*The Georg-August-Universität Göttingen
seeks qualified applicants for the positions of*

Postdoctoral Research Assistant and PhD student

starting on or after July 1, 2011, pending final funding approval.

The project focuses on the analysis and development of simultaneous denoising and deconvolution techniques for image processing in the context of *fluorescence microscopy* of cell structures at the nanoscale. The research lead by Professors Russell Luke and Axel Munk is a participating project of the DFG-funded Collaborative Research Center 755 “Nanoscale Photonic Imaging” and has as its central aim the development of mathematical, statistical and algorithmic techniques to fully exploit the new technical capabilities being developed by other projects within the center. Our goal is to develop locally adaptive, fully data-driven statistical regularization methods for the reconstruction of *blurred and noisy* images. This involves the application of *statistical multi-scale analysis* to design the relevant statistical image analysis criterion, and *variational analysis* to solve the resulting optimization problems. The project requires a synthesis of two different fields of mathematics - mathematical statistics and optimization - with an application in biophysics. The position is intended to promote the academic careers of young researchers and provides the opportunity to complete a habilitation or a PhD apart from collaboration with this project.

Prerequisite for the postdoc position is a PhD in Mathematics or a related area and for the PhD position a Masters in Mathematics or related area. The ideal candidate will have a strong background in either one of mathematical statistics or optimization, a willingness to branch out to the other field, and an interest in applications to image processing and/or biophysics.

The postdoctoral position is in the salary group 13 TVL (39.8 hours/week) for the duration of 4 years. The PhD position is in the salary group 13 TVL (75%) for the duration of 3 years.

Applications including a cover letter, curriculum vitae, list of publications, copies of relevant academic transcripts and university degrees, and the names and addresses of two references should be sent, preferably in electronic form, within four weeks of the publication of this announcement to:

Anja Frakstein (secretary), anja.frakstein@mathematik.uni-goettingen.de, keyword CRC 755/A4.

For further information about the research project contact

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Please only submit copies of your application documents. Your documents will not be returned. After a period of five months they will be destroyed. The University of Göttingen strives to increase the proportion of women in areas in which they are underrepresented and emphatically invites qualified women to apply. Handicapped applicants with suitable qualification will be given priority.