



GEORG-AUGUST-UNIVERSITÄT  
GÖTTINGEN

The Institute for Mathematical Stochastics at the Georg-August-University of Göttingen seeks qualified applicants for the position of a

### **PhD Student**

(salary group 13 TV-L, part-time, 26.7 hours/week)

starting December 1<sup>st</sup>, 2014 for the duration of 3.5 years

within the DFG-funded project

### ***CRC 860 “Integrative structural biology of dynamic macromolecular assemblies”***

The position is part of sub-project B09 “Computational methods for modelling macromolecular complexes”, which aims to develop statistical and computational tools for characterizing the structure and dynamics of large macromolecular complexes. Structural information on macromolecular complexes can be obtained through an array of experimental techniques including X-ray crystallography, solution and solid-state NMR, cryo-EM, small-angle X-ray scattering and cross-linking/mass spectrometry. These methods provide data of varying quality and information content. Typically the data are by themselves not sufficient to determine an atomic structure. Therefore the integration of heterogeneous data is often the only practical approach to elucidate the structure of a macromolecular complex. We aim to use Bayesian inference to develop robust and versatile computational tools for combining diverse structural data in order to determine the three-dimensional structure of biomolecular complexes.

Successful candidates will ideally have a background in at least one of the following fields: Bayesian inference, bioinformatics, biophysics, machine learning, statistics, or statistical physics as well as good programming skills (e.g. C or Python). A willingness to participate in interdisciplinary research with experimental groups in biophysics and biochemistry at the Göttinger Research Campus is also desirable.

The University of Göttingen is an equal opportunities employer and places particular emphasis on fostering career opportunities for female scientists and scholars. Qualified women are therefore strongly encouraged to apply. Disabled persons with equivalent aptitude for the position will be favoured.

Please send your full application preferable as a single PDF file until November 1st, 2014, referring to the code SFB860/B09 to

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We request that you send us your application in copy or by e-mail only, as the documents are not returned and destroyed after a holding period of five months.