

## The Centre for Statistics

The RTG is hosted by the Centre for Statistics which was founded in 2001 as an interdisciplinary institution reflecting the emerging importance of various fields of applied statistics. Currently, the centre comprises more than 25 researchers from seven faculties.

## The University

Georg-August University, founded in 1737, and its 24.000 students substantially influence life in Göttingen, a city of approximately 130.000 citizens. More than 40 Nobel prize winners have lived, studied, researched and taught in Göttingen during the last century. C.F. Gauss, the founder of many statistical and mathematical methods, including least squares, was professor in Göttingen about 200 years ago.



One of the peculiar traditions in Göttingen; Kissing the Gänseliesel without falling into the basin is the final 'exam' before receiving the Ph.D. This is obligatory ... can **you** manage this?

## The City

The friendly and cosmopolitan city of Göttingen with a well preserved historical centre and buildings from the middle age offers a broad range of cultural and sports facilities. Göttingen is located in the centre of Germany, close to the Harz Mountains with ample opportunities for outdoor activities. Train connections are marvellous and most places within Germany can be reached within 2-4 hours.

## Studying in the RTG

### "Scaling Problems in Statistics"

After finishing my Master in Ecology in Brazil, I was looking for a Ph.D. program that would help me improve my skills in statistics, allow me to work further in my field and give me the opportunity to study abroad. The RTG 1644 provides all that, given the great offer of statistics courses and the wide range of topics for research in many scientific fields. Additionally, this framework gives me the chance to interact and collaborate with students from different disciplines, which opens new possibilities to solve problems in my own field.



*Tatiane Beduschi, biologist and Ph.D. student in the Agroecology group.*

I studied mathematics and economics at the University of Oldenburg, Germany. The RTG offers great opportunities to do cross-disciplinary work with other researchers in the fields of economics, genetics and ecology. As a statistician, I find the work very interesting because it involves using highly complex, theoretical models to solve applied problems in other sciences. The working atmosphere in the research training group is very inspiring and there are plenty of opportunities for social activities with the other PhD students. The RTG also supports me as a father to combine my scientific work with my family life.



*Benjamin Säfken, mathematician and Ph.D. student in the Statistics and Econometrics group.*

## Contact

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**Interdisciplinary  
Research Training Group**  
"Scaling Problems in Statistics"



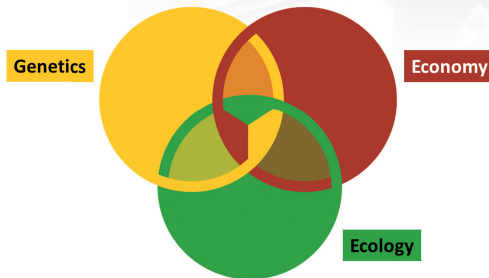
## Aims and Scope

The Research Training Group, funded by the German Research Foundation (DFG), started in October 2010. It aims to develop solutions to problems of scale that arise in areas of current scientific and public interest. This comprises the identification of adequate methods, their modification, and the development of new statistical models and methodology.

Three areas of application are considered:

- ▶ economy
- ▶ environmental sciences
- ▶ genetics

Methodologically, these applications embrace two related branches of statistical methods: mixed models and spatial statistics. Topics covered across the disciplines are welfare and food affairs including poverty, biodiversity including degradation, and biological control. Building on interdisciplinary cooperation and the associated synergistic effects, we expect new impulses for research and more advanced solutions to complex practical problems.



## Our Ph.D. Programme

The programme has two foci: methodology and interdisciplinarity. Hence, the RTG offers courses in statistical methodology and training on diversity competence. Interdisciplinary research will be fostered by a matching thesis committee and seminars with speakers from all research fields represented in the RTG. Scientific exchange will be facilitated by regular visits of renowned researchers and by participation in workshops and conferences. Research stays abroad are encouraged; in some projects they are obligatory. Finally, the students also have the opportunity to follow specialized courses in their own subjects. All courses are taught in English.

## Your Background and Interest

You are interested in at least one of the areas

- ▶ Agricultural market analysis
- ▶ Agricultural policy
- ▶ Animal breeding
- ▶ Biodiversity
- ▶ Econometrics
- ▶ Forest inventory
- ▶ Genetic epidemiology
- ▶ Population processes
- ▶ Remote sensing
- ▶ Spline estimation
- ▶ Spatial ecology
- ▶ Spatial statistics
- ▶ Statistical genetics
- ▶ Stochastics



and hold an excellent MSc in economics, ecology, forest science, genetics, mathematics, statistics, or a related field.

## Scholarships

The RTG offers 13 scholarships (0.75 TVL-E13 positions) for three years which amount to 2400 EUR pre-tax per month. The RTG also associates Ph.D. students who obtain third party funding, e.g. by DAAD, and whose subject is closely related to the RTG.

## Application Deadlines

The application deadline for the 2<sup>nd</sup> cohort is May 15, 2013. Some positions might be available later. If you obtain third party funding, you can contact a potential supervisor any time.

## The Team

### The team of RTG supervisors

- ▶ Heike Bickeböllner: genetic epidemiology, statistical genetics
- ▶ Bernhard Brümmer: agricultural market analysis
- ▶ Stephan von Cramon-Taubadel: agricultural policy, applied econometrics
- ▶ Helmut Herwartz: econometrics
- ▶ Christoph Kleinn: forest inventory, remote sensing
- ▶ Thomas Kneib: semiparametric regression, distributional regression, spatial statistics
- ▶ Tatyana Krivobokova: applied statistics, spline estimation
- ▶ Katrin Meyer: plant ecology, ecosystems
- ▶ Christoph Scherber: biodiversity, ecosystem processes
- ▶ Henner Simianer: statistical genetics, population genomics
- ▶ Anja Sturm: population processes, genealogies
- ▶ Teja Tschardtke: agroecology
- ▶ Kerstin Wiegand: spatial ecology

### Associated researchers are

- ▶ Dirk Brockmann (Northwestern University): dynamics on networks
- ▶ Daniel Gianola (University of Wisconsin-Madison): statistical genetics
- ▶ Johan Leveau (University of California): plant pathology

