Leibniz MMS Summer School 2018: Statistical Modeling and Data Analysis

September 3 – 7, 2018

Oberwolfach Research Institute
for Mathematics (MFO)
Schwarzwaldstr. 9-11
77709 Oberwolfach-Walke

Concept

Experimental or observational data of high or infinite dimensionality are getting common in institutes of all sections of the Leibniz Association. This creates an increasing demand for adequate modern data analysis techniques. At the same time reproducibility of experiments and their statistical analyses lead to new requirements for good scientific practice and requests for open source and open science.

We will address both topics with the first PhD Summer School of the Leibniz Network "Mathematical Modeling and Simulation" in a way that provides knowledge transfer from mathematical and applied statistics into various scientific communities and helps to develop skills in R programming, statistical modeling and reproducible data analysis.

The School will be problem oriented. Participants are asked to provide their data and problems in advance.

Introductory morning sessions are planned to cover the following topics:

- *Complex 1:* R programming and good scientific practice

- *Complex 2:* Modeling high-dimensional data (will be adjusted according to the particular problems provided by the participants)

- *Complex 3:* Statistical methods for functional data (will be adjusted according to the particular problems provided by the participants)

Afternoon sessions in smaller groups will be used to discuss selected submitted problems and to model and analyze the corresponding data. Data analysis will be performed using the R Language and Environment for Statistical Computing and Graphics. Participants are asked to bring their own laptop with R and preferably R-studio installed.

Speakers

- C. Happ, LMU Munich
- J. Polzehl, WIAS Berlin
- H. Seibold, LMU Munich
- A. Stöcker, LMU Munich
- A. Suvorikova, WIAS Berlin
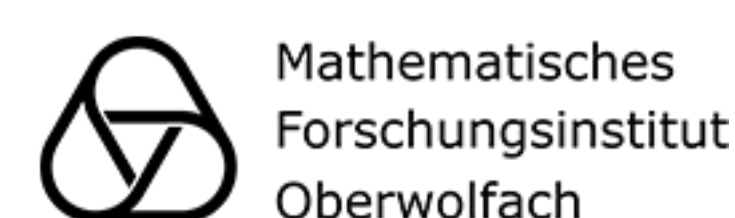
Deadline for application

June 15, 2018

Further information and registration

www.wias-berlin.de/research/Leibniz-MMS/SummerSchool18.jsp

Contact

mmsschool2018@wias-berlin.de

Support

Leibniz
Association

Mathematisches
Forschungsinstitut
Oberwolfach

Weierstrass Institute for
Applied Analysis and Stochastics

www.wias-berlin.de