

Dr. Gerhard Schöfl

Statistical Data Analysis with R

05–06 June 2014, 9.00–17.00 h

MMZ, Ernst-Abbe-Platz 8, SR 205

You are already comfortable with the basic concepts of R, or have completed the course „Introductory Data Analysis with R“? Here we will touch on some more advanced topics in statistical data analysis, taking advantage of R's nature as a statistical programming language.

You will learn to create your own functions in R, and we will talk about simulations, permutations, and bootstraps. We will revisit the tenets of statistical inference and P-values, and cover some of the more popular statistical methods like linear models, principal component analysis, and cross validation.

We won't be focussing overly on the mathematical detail, but rather on how you apply these techniques to real world data sets using R, how you interpret the results, and how you diagnose potential problems in your analyses.