Introduction into R

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R is the most popular programming language for statistical analysis and data visualization. In this practical course you will learn the basic concepts of R. The target audience are IMPRS students and postdocs. We will include the following topics:

- Structures: Data and Functions
- Descriptive Statistics: deriving basic information from data
- Visualization: customizing simple plots, and high-dimensional data representation
- I/O: getting data into and out of R
- Data munching: preparing and shaping data for analysis
- Automation: writing simple scripts for repeated use
- Packages: using community power for difficult task

Goal:
After the course you will be able to use R for simple statistical analysis, repetitive computations, and the generation of publication-ready images. More importantly, you will also be able to identify and use thousands of public software packages that can help you with more challenging tasks and domain-specific analyses

Requirements:
1. WLAN capable laptop (non-Windows!)

2. R installed (https://cran.rstudio.com/) **and**
   open source RStudio https://www.rstudio.com/products/rstudio-desktop/
                          --- or ---
   user account with access to MPI-IE Rstudio server
   (this requires a linux account and your laptop to be registered with the core-IT)

Course language: English

Maximal Number of Participants: 15