Using R at LRZ

R is a highly popular and powerful programming language for data analysis and graphics, used in many research domains. The Leibniz Supercomputing Centre (LRZ) is addressing the needs of different R users by facilitating various ways of working with R on LRZ systems. For one it is hosting a RStudio Server web service that provides an easy to use and powerful platform mostly targeted at interactive analyses. This service can, however, also be used as a gateway to the high performance computing systems at LRZ. Additionally, R can be employed directly on the massively parallel Linux Cluster as well as on specialized, GPU-enhanced machine learning systems.

In this course, we will illustrate the different possibilities of using R at LRZ and provide guidelines and best practice examples for running R applications efficiently on the various systems.

Schedule (tentative)

0900-0930 Short overview of using R on the high performance computing systems at LRZ
0930-1000 Working with the RStudio Server
1000-1030 Working on the Linux Cluster (setup and the batch scheduler)

1100-1230 R on the Linux Cluster (interactive, simple batch jobs)
1330-1500 R on the Linux Cluster (parallelization strategies)
1500-1800 Applied parallelization and machine learning with R