## Machine Learning with R at LRZ: Introduction to batchtools

## Exercise 1

Take the benchmark from the second mlr exercise sheet and run it on the cluster. The spam dataset has the OpenML data.id 44.

- 1) Run it on the *serial* cluster. Each slurm job should do a full 10-fold CV.
- 2) Run it on the mpp2 cluster using 2-level parallelization with parallelMap. Each slurm job is still a 10-fold CV but is parallelized on a node using the multicore backend of parallelMap.
- 3) If you want to replicate the experiment with multiple different 10-fold crossvalidations, how do you need to change the code?

## Exercise 2

Have a look at the Best Practices slides.

1) Take the demos (demos/batchtools\_mlr\_classif.R, demos/batchtools\_mlr\_tuning.R) and try to apply these tips to improve the code.