

Note: Simulation Study

Supplement to ‘Valid Simultaneous Inference in High-Dimensional Settings (with the HDM Package for R)’ (Bach et al., 2018)

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Note on Replicability / Simulation Study

The simulation was run in parallel on a linux cluster. For each sample size $n \in \{200, 500\}$, the 5000 repetitions were parallelized manually on 8 nodes to reduce computation time, i.e. the 8 R-files with each running 625 repetitions are essentially identical.

The results of the 8 computations are merged using the R scripts “simul_server_MERGE.R” ($n = 200$) and “simul_server_n500_MERGE.R” ($n = 500$), respectively. These scripts contain the code for calculation of the results in the paper, as well. Helper functions for calculating the results (FWER, number of (in-)correct rejections, FDR) are provided in “helpers.R”.