The essence of today's course is to help users to understand the difference and move from local machines (desktop, laptop, workstation) to one of the supercomuters of SCC (UC3=bwUniCluster or HoreKa).

You need separately a program to copy files from/to the supercomputer. For this you may use WinSCP (windows), MobaXterm (windows), filezilla (linux) etc. You also need a tool to type the commands (called terminal) – this can be e.g. PuTTY, or a local linux partition on your local computer. There are many different ways of doing those tasks, we cannot list all of them here. Our computers can be accessed by:

uc3.scc.kit.edu (bwUniCluster) or horeka.scc.kit.edu (HoreKa)

Local computer: Serial computations	Supercomputer: parallel simulations
1. Install openFOAM	1. „module load …“ + foamInit
2. Use local HDD	2. Use workspaces
	3A. decomposePar (for parallel jobs)
3. Start directly: pimpleFOAM	3B. Edit a job-file and submit a job to one of the queues
	3C. **Do not use the Allrun-script** in case of large parallel runs! Grid generation is not parallelized and **Allrun is very bad for large cases.** Use the steps we teach you today!
	4A. reconstructPar (optional but recommended)
4. View in ParaView	4B. Copy result-files locally and view in ParaView