



COURSE OVERVIEW

GSP GPU COURSE 2018

8 August 2018 | Andreas Herten | Forschungszentrum Jülich

GPU Course

- This course: Based on other JSC courses
- Mostly CUDA course
- At end: OpenACC
- Interactive course – many hands-ons 🙌

Timetable

Session	Day 1	Day 2
M1	Introduction to GPU Programming I <i>Andreas, Jan</i>	Multi-Node GPU I <i>Andreas, Jan</i>
B	<i>Coffee Break (10:30 - 11:00)</i>	
M2	Introduction to GPU Programming II <i>Andreas, Jan</i>	Multi-Node GPU II <i>Andreas, Jan</i>
B	<i>Lunch Break (12:30 - 13:30)</i>	
A1	GPU Tools <i>Andreas, Jan</i>	OpenACC I <i>Andreas, Jan</i>
B	<i>Coffee Break (15:00 - 15:30)</i>	
A2	CUDA Unified Memory <i>Andreas, Jan</i>	OpenACC II <i>Andreas, Jan</i>



Organizationals

- Curriculum not very strict
 - We take more time when necessary
 - We can be faster (at parts) on your request
- Coffee breaks: Up to you!
- Lunch breaks: In canteen (*Casino*)
- Interactive course!
 - Lots of hands-on in different tasks!
 - Feel free to ask questions, also during lectures
- No time to cover **all things GPU** → we want to give **jump start**

More Technicalities

- Supercomputers for this course: **JUWELS**
- Supernew supercomputer; **you're privileged to be beta testers!**
- Infrastructure for tasks
 - Each person has login: `train093` - `train120`
 - Logins for each
- Tasks
 - Tasks are in home directory of supercomputers → best to solely work on JUWELS
 - Sorted by session
 - Solutions are always given, you decide how long you tinker before peaking into solutions (Hint: The later, the more benefit you will get from this course!)
 - There's a cheat sheet for the most important commands!

Let's Get Started!

Questions?