alpaka Parallel Programming – Online Tutorial
Lecture 00 – Getting Started with alpaka

Lesson 06: alpaka Workflow

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Lesson 06: alpaka Workflow

Based on CMake

- Starting tomorrow, the lectures will become more detailed

- We will start to do actual work with alpaka

- alpaka is usually used with an up-to-date CMake (>= 3.15)

- All examples in the upcoming lectures will require CMake >= 3.15

Lesson 06: alpaka Workflow

No CMake available?

- Special stand-alone headers available. Example for CUDA GPUs:
  ```
  #include <alpaka/standalone/GpuCudaRt.hpp>
  ```

- Beware: **You** will have to guarantee for all dependencies, compatibilities and compiler-specific flags!

Lesson 06: alpaka Workflow

alpaka and cupla

- alpaka: *Abstraction Library for Parallel Kernel Acceleration*
  - **https://github.com/alpaka-group/alpaka**
  - Focus of the lectures

- cupla: *C++ User Interface for the Platform Independent Library Alpaka*
  - **https://github.com/alpaka-group/cupla**
  - Thin layer over alpaka
  - CUDA-style API, intended for porting existing CUDA codes
  - Not covered here

Lesson 06: Lecture Workflow

Slides and examples

- All slides will be uploaded after the corresponding lecture took place

- We will upload the slides to here: **https://github.com/alpaka-group/alpaka-workshop-slides**

- The lecture sessions are recorded. We will send around the links to the videos once we obtained them from the video conference system.

- Examples can be found here: **https://github.com/alpaka-group/alpaka-workshop-examples**

Lesson 06: Lecture Workflow

Cheat sheet

- A cheat sheet / FAQ is available here:
  https://github.com/alpaka-group/alpaka-workshop-slides/tree/master/cheatsheet