

AGENDA FOR GPU WORKSHOP

AT
UNIVERSITY OF BREMEN
11.03. - 13.03.2013



11.03.2013

- 10:00 - 11:30 Lecture. From GPU to GPGPU. Introduction to CUDA.
CUDA programming model. CUDA Runtime API.
- 11:45 - 13:15 Hands-on session: Introduction to CUDA. Device properties. Vector addition.
- 13:15 - 14:30 Lunch
- 14:30 - 15:45 Lecture. Memory hierarchy. Standard algorithms: reduce.
- 16:00 - 17:30 Hands-on session: memory hierarchy.

12.03.2013

- 10:00 - 11:00 CUDA accelerated libraries overview.
- 11:15 - 13:15 Hands-on session: eigenvalue example.
- 13:15 - 14:30 Lunch
- 14:30 - 15:45 Thrust for STL-like library dealing with GPU. CUSP.
- 16:00 - 17:30 Hands-on session: Thrust. CUSP

13.03.2013 Workshop Members only

- 10:00 - 11:30 Optimization techniques. Profiling and debugging.
- 11:45 - 13:15 Contest: optimization
- 13:15 - 14:30 Lunch
- 14:30 - 15:45 Rapid CUDA development with directives. OpenACC.
- 16:00 - 17:30 Hands-on session: OpenACC.
- 17:30 - 18:00 Concluding remarks. Q&A session.

13.03.2013 Introduction Event

- 9:00 - 9:30 *Registration and hardware exhibition*
- 9:30 - 9:35 *Opening*
- 9:35 - 9:45 *Tesla hardware Nvidia/sysGen*
- 9:45 - 11:15 *Cuda introduction*
- 11:15 - 12:00 *Pause and hardware exhibition*
- 12:00 - 13:15 *OpenACC*
- 13:15 - 14:30 *Lunch and hardware exhibition*