

# AGENDA FOR GPU WORKSHOP

AT  
UNIVERSITY OF KIEL  
06.03. - 08.03.2013



## **06.03.2013**     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     *Break and hardware exhibition*
- 12:00 - 13:15     *OpenACC*
- 13:15 - 14:30     *Lunch and hardware exhibition*

## **06.03.2013**     Workshop Members only

- 14:30 - 15:00     Lecture. From GPU to GPGPU. Introduction to CUDA.  
CUDA programming model. CUDA Runtime API.
- 15:00 - 16:00     Hands-on session: Introduction to CUDA. Device properties. Vector addition.
- 16:00 - 16:15     Break and hardware exhibition
- 16:15 - 17:15     Lecture. Memory hierarchy. Standard algorithms: reduce.
- 17:15 - 18:30     Hands-on session: memory hierarchy.

## **07.03.2013**     Workshop Members only

- 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     Thurst for STL-like library dealing with GPU. CUSP.
- 16:00 - 17:30     Hands-on session: Thrust. CUSP

## **08.03.2013**     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.