



Parallel Programming for Computational Engineering & Science HPC Seminar



March 22-26, 2010

RWTH Aachen University, Center for Computing and Communication

	Monday	Tuesday	Wednesday	Thursday	Friday
	March 22	March 23	March 24	March 25	March 26
9:00 - 10:30		MPI Basics	Introduction to OpenMP	Performance Tuning for Cache-based Systems	Introduction an Overview
		Lab: MPI Basics			GPU HW Architecture, CUDA C Intro Comp. Cuda C - OpenCL
10:30 - 11:00		coffee break	coffee break	coffee break	coffee break(10:15-10:45)
11:00 - 12:30	Welcome and Introduction	MPI Overview	Using OpenMP	Performance Tuning Basics	GPU Paradigms Overview
	User Environment on Linux and Windows: Access, Compilers, MPI Libraries	Lab: MPI Overview	Lab: OpenMP Basics	Oracle Performance Analysis Tools	GPU Programming User Experiences
12:30 - 14:00	lunch break	lunch break	lunch break	lunch break	lunch break (12:45-14:00)
14:00 - 15:30	Program Development on Linux and Windows	Parallelization Strategies MPI Case Studies	Advanced OpenMP	Introduction to Performance Tools in Aachen	GPU In-depth: Performance Programming and Programming Tools
	Parallel Sessions / Lab: Program Development on Linux and Windows			Case Study	
15:30 - 16:00	coffee break	coffee break	coffee break	coffee break	
16:00 - 17:30	Parallel Sessions / Lab: Debugging on Linux and Windows	Parallel Sessions / Lab: MPI Interactive and Batch on Linux and Windows	Lab: Advanced OpenMP	Lab: Parallelization and Performance Tools with Focus on VampirTrace	
			OpenMP Debugging		
19:00 -			<u>Social event in Kazan</u> Annastraße 26		