

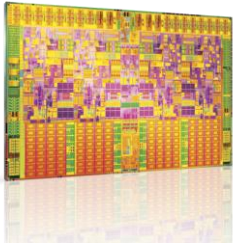


HPC Tuning Workshop

December 06 - 08, 2010

Kopernikusstraße Seminarroom 002

<u>Monday 06</u>	
09:00 – 10:00	CPU Architecture (generic) <i>Christopher Dahnken</i>
10:00 – 10:30	OpenMP Refresher <i>Christian Terboven</i>
10:30 – 10:45	Coffee Break
10:45 – 11:30	Performance Tuning Methodology <i>Christopher Dahnken</i>
11:30 – 12:30	Nehalem Pipelines, Sandybridge u. AVX close to metal <i>Christopher Dahnken</i>
12:30 – 14:00	Lunch Mensa Ahornstraße
14:00 – 15:00	VTune Guide into Microarchitecture Tuning (Amplifier)
15:00 – 16:00	Hands-On Work
16:00 – 16:15	Coffee Break
16:15 – 17:30	Microarchitecture Tuning for Core i7 (Nehalem) <i>Christian Iwainsky</i>
17:30 – 18:00	Hands-On Work
<u>Tuesday 07</u>	
09:00 – 10:30	Loop Independence and Compiler Vectorization and Threading of the Loops (AVX) <i>Michael Klemm</i>
10:30 – 10:45	Coffee Break
10:45 – 12:30	Hands-On Work
12:30 – 14:00	Lunch Mensa Ahornstraße
14:00 – 15:00	Hands-On Work
14:00 – 15:00	(optional) Visual Studio <i>Christian Terboven</i> ➡ Seminarroom 001
15:00 – 16:00	Threading and Cluster Tools Overview <i>Michael Klemm/Christopher Dahnken</i>
16:00 – 16:15	Coffee Break
16:15 – 18:00	Hands-On Work
<u>Wednesday 08</u>	
09:00 – 09:30	cc-NUMA Architectures and Multi-threading <i>Christian Terboven</i>
09:30 – 10:00	Multi-threading Tuning including NUMA for Intel Nehalem <i>Christian Iwainsky/Christopher Dahnken</i>
10:00 – 12:30	Hands-On Work
12:30 – 14:00	Lunch Mensa Ahornstraße
14:00 – 15:00	(optional) Debugging <i>RWTH</i> ➡ Seminarroom 001
14:00 – 16:00	Hands-On Work
15:00 – 16:00	(optional) Beyond Single Node Performance ➡ Seminarroom 001 <i>Christian Iwainsky</i>
16:00 – 16:15	Coffee Break
16:15 – 18:00	Hands-On Work
19:00 -	Social Dinner – Restaurant Elisenbrunnen



Array Building Blocks Tutorial (Intel Ct)

December 09 - 10, 2010

Kopernikusstraße Seminarroom 1

<u>Thursday 09</u>	
09:00 – 10:30	Introduction to Intel ArBB (Ct)
10:30 – 10:45	Coffee Break
10:45 – 12:30	Introduction to Intel ArBB (Ct) continued
12:30 – 14:00	Lunch Mensa Ahornstraße
14:00 – 17:00	Hands-On Work
17:00 – 17:15	Wrap-up (optional)  Seminarroom 001
<u>Friday 10</u>	
09:00 – 10:30	ArBB Execution Engine
10:30 – 10:45	Coffee Break
10:45 – 12:30	ArBB Advanced Programming
12:30 – 14:00	Lunch Mensa Ahornstraße
14:00 – 15:30	Hands-On Work
End of Tutorial	