

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

CSCS

Swiss National Supercomputing Centre



CSCS Training and Events

Timothy Stitt Ph.D., Scientific Computing Group, CSCS Manno
User Assembly, KKL, Luzern, 2009

Cray XT5 Induction Course

- "An Introduction to the Cray XT5"
 - High-level overview of architecture and programming environment.
- Presenter(s):
 - Roberto Ansaloni (Cray Inc, Italy)
- June/July 2009.

Cray XT5 Code-Porting Workshop

- Hosted in association with **PRACE** (Partnership for Advanced Computing in Europe)
- Three day workshop
- Presenter(s):
 - John Levesque (Cray Inc, U.S.)
 - Roberto Ansaloni (Cray Inc, Italy)
- **July 13th-15th 2009.**
- Registration will open soon.















Code-Porting Workshop continued...

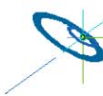

Topics

- Architectural features of the XT5 node
- Compiler optimizations
- Code vectorization, cache-blocking and memory pre-fetching directives
- MPI optimization
- Code Profiling with CrayPAT and Apprentice

Parallel Programming Workshop

- “Programming MPI, OpenMP and PETSc”
- Presenter(s)
 - Rolf Rabenseifner, HLRS
 - Neil Stringfellow, CSCS
- 11th – 13th August, 2009

3-Day-Course — 2nd day	
Message Passing Interface (MPI-1, part 2) and OpenMP	
8:30	Introduction to CSCS Computing Resources [lecture by CSCS]
9:00	Chap. 6 Virtual Topologies [3, continued] (talk+practical) 
10:10	Coffee
10:25	Chap. 7 Collective Communication (talk+practical) 
11:00	Coffee
11:15	Chap. 8 Other MPI-1 features (talk) 
11:40	Heat conduction program, a parallelization example with MPI [6] (talk)  
12:00	Lunch
13:00	OpenMP – Overview and execution model [7+7a] (talk+practical) 
14:00	Coffee
14:15	OpenMP – Work sharing directives (talk+practical) 
15:15	OpenMP – Data environment (talk+practical) 
16:00	Coffee
16:15	OpenMP – Summary and Pitfalls (talk) 
16:45	Assure/ThreadChecker – detection of OpenMP race conditions [8] (talk) 
17:30	End  

 Introduction Rolf Rabenseifner
Slide 10 (3-Days) Höchstleistungsrechenzentrum Stuttgart 



General HPC Training Courses 2009

1. An Introduction to Parallel Debugging
2. Performance Profiling and Optimization
3. An Introduction to the PGAS Programming Model using Global Arrays and UPC.



CSCS User Day

The 2009 CSCS User Day will be held at the
Radisson Hotel in Luzern on September 11th.