HPC-Hessen Kick-Off Event

All presentations will be in English.

On September 22-23, 2014, the kick-off workshop of HPC-Hessen (Hessisches Kompetenzzentrum für Hochleistungsrechnen) will take place in Darmstadt. It is the second workshop about High Performance Computing Hessen (HiPerCH).

This workshop is addressed to all scientists that use high performance computing in Hessen. The goal of this event is to advance competence of users on high performance computing.

Following HiPerCH, a workshop for users of HPC clusters in Hessen is organized on September 24, 2014. Morning sessions introduce clusters in Darmstadt (Lichtenberg-Cluster) and Frankfurt (FUCHS, LOEWE). Afternoon sessions concentrate on user group meetings.

Registration: Please register on our webpage by **August 31, 2014**.
URL: http://www.hpc-hessen.de/en/hpc-hessen/veranstaltungen/current-events/

Attendance fee: 50,00 Euro. This includes lunch and coffee breaks as well as the evening event (Monday, September 22). Please pay by September 15, 2014:

Sparkasse Darmstadt
(BLZ: 508 501 50; Kto.-Nr. 704 300)
IBAN: DE 36 5085 0150 0000 7043 00,
BIC: HELADEF1DAS
Reason for payment: SC 582 00346,
HiPerCH 2, "your name", "your university"

For further information, please visit our webpage: URL: http://www.hpc-hessen.de

Contact:
Hessisches Kompetenzzentrum für Hochleistungsrechnen
Mornewegstraße 30
64293 Darmstadt
Email: veranstaltungen@hpc-hessen.de

Location:
TU Darmstadt, Lichtwiese, Franziska-Braun-Straße 3
Building L5|06, Room 11 (September 22-23)
Building L5|01, Room 32 (September 24)

Bild: Katrin Binner

Directions to TU Lichtwiese:
Travel by public transport:
At Darmstadt's main train station (Darmstadt Hauptbahnhof) stop long-distance trains as well as regional and interurban trains, buses, and street cars. From the railway station take Bus "K" in direction "Lichtwiese" (terminal stop). You can also use the train Odenwaldbahn RE 65 (train 65) to "TU Lichtwiese", which has a direct connection from Frankfurt main train station to Darmstadt.

Travel by car:
Leave autobahn A5 (Frankfurt/M – Heidelberg, Basel), or A67 (Köln, Wiesbaden – Mannheim) at the exit "Darmstädter Kreuz", direction to "DA-Stadtmitte", and follow the traffic signs to "TUD-Lichtwiese" in the eastern direction towards Aschaffenburg and "Vivarium". The university area "Lichtwiese" is situated on the eastern outskirts of the city.
Please note that parking costs 2,50 € per day; the vending machines accept only coins!

Hessisches Kompetenzzentrum
für Hochleistungsrechnen

HPC-Hessen Kick-Off Event

High Performance Computing Hessen (HiPerCH 2)
September 22-24, 2014
Darmstadt

Agenda

Monday, September 22, 2014
Building L5|06, Room 11

10:30 Opening

10:45 Welcome and Introduction to HPC-Hessen
DR. ALEXANDRA FEITH, DR. DÖRTE C. STERNEL (HPC-HESSEN)

11:15 HPC Deployment of OpenFOAM for Direct Numerical Simulations of Two-Phase Interfacial Flows
DR. HOLGER MARSCHALL (TU DARMSTADT)

12:15 LUNCH BREAK

13:15 Introduction to GPGPU Programming and Applications
PROF. DR. MICHAEL GOESELE, PROF. DR. SEBASTIAN SCHÖPS (TU DARMSTADT)

14:45 COFFEE BREAK

15:15 Porting CP2K to Accelerators: Efficiency, Performance, Scaling
DR. STEPHEN SACHS (CRAY INC.)

16:15 NAG Products (libraries, toolbox, and compilers) + HPC features, and available features on the Lichtenberg Cluster, TU Darmstadt
FRANCOIS CASSIER (NAG, ACCOUNT MANAGER EUROPE)

19:00 EVENING EVENT

Tuesday, September 23, 2014
Building L5|06, Room 11

09:15 Introduction into Serial/Parallel Performance, Parallel Paradigms, MPI, OpenMP
(UWE KÜSTER, HIGH PERFORMANCE COMPUTING CENTER STUTTGART, HLRS)

10:30 COFFEE BREAK

11:00 Practical Hybrid Parallel Application Performance Engineering, Part 1
MARC-ANDRE HERMANNS (RWTH AACHEN, JARA-HPC), THOMAS ILSCHE (TU DRESDEN, ZIH)

12:30 LUNCH BREAK

13:30 Practical Hybrid Parallel Application Performance Engineering, Part 2
MARC-ANDRE HERMANNS (RWTH AACHEN, JARA-HPC), THOMAS ILSCHE (TU DRESDEN, ZIH)

15:30 Closing discussion & remarks

Bild: Katrin Binner

Wednesday, September 24, 2014
Building L5|01, Room 32

9:00 Overview of Hardware and Access to HPC Cluster in Frankfurt
DR. DAVID PALAO (GOETHE-UNI FRANKFURT)

10:00 COFFEE BREAK

10:30 Overview of Hardware and Access to HPC Cluster in Darmstadt
DR. ANDREAS WOLF (TU DARMSTADT)

11:30 How to Work Efficiently on ccNUMA Architecture
THOMAS OPFER (TU DARMSTADT)

12:30 LUNCH BREAK

13:30 User Group Meetings
e.g.: Gaussian, VASP, MATLAB on parallel systems, OpenFOAM

One of the outcomes of our survey on high performance computing in Hessen was that you are interested in meeting other users. We would like to give you this possibility on Wednesday afternoon.

If you would like to participate in a user group meeting, please confirm it at the registration. We gave you some topic examples. It is also possible to arrange one of the meetings. Please let us know!

September 09, 2014