HiPerCH 6

All presentations will be in English.

This workshop is targeted at Hessian students and scientists with interest in programming modern HPC hardware.

You can book each module by itself.

Registration: Please register on our webpage. URL: **http://www.hpc-hessen.de/en/ user-support/regular-events/hiperch-6/**

Attendance fee: There is an attendance fee that depends on the different modules. This fee includes lunch and coffee breaks as well as the evening events.

Bachelor and Master students (certificate of study is necessary) receive a 50% discount. After your registration you will receive a bill for this workshop in early September. Please pay by September 15, 2016:

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 6, "your name", "your university"

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

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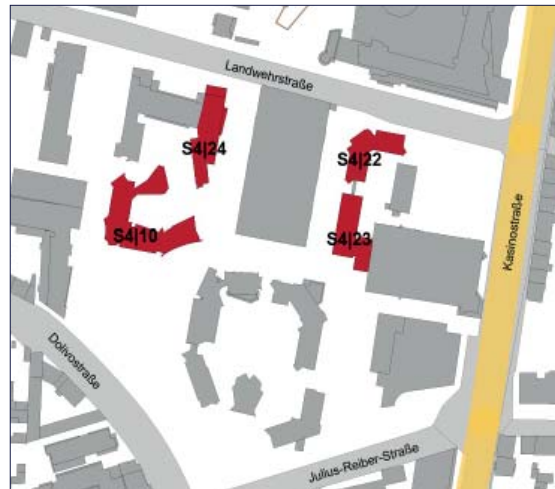Mornewegstraße 30
64293 Darmstadt
Email: veranstaltungen@hpc-hessen.de

Location:
HiPerCH 6
TU Darmstadt
Landwehrstraße 48A, 50
S4|10 Room 1 (Tuesday)
S4|22 Room 5 and 6 (Wednesday - Friday)
64293 Darmstadt

Directions to TU Darmstadt

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" or „K 56" to „Kasinostrasse".

Travel by car:
Leave autobahn A5 (Frankfurt/M – Heidelberg, Basel), or A67 (Köln, Wiesbaden – Mannheim) at the exit "Darmstädter Kreuz", direction to "DA-Stadtmitte", turn left at „Kasinostraße/B3", and again left at „Landwehrstraße".
Please note that parking costs 2,50 € per day; the vending machines accept only coins!

HESSEN

Hessisches Kompetenzzentrum für Hochleistungsrechnen

Bild: Katrin Binner

HiPerCH 6
High Performance Computing Hessen
Introduction to High Performance Computing
September 27 - 30, 2016
Darmstadt

Agenda

HiPerCH 6 includes four independent modules. Special attention should be paid to module 4, the „introduction to the TotalView debugger": HKHLR organized a Hessian-wide license (funded by HMWK), which can be used free of charge from all Hessian universities.

Tuesday, Sept. 27
🕐 10:30 - 18:15
S4|10 ROOM 1 (DOLIVOSTRASSE 15)

Modul 1:
Brainware for Science
(Talks, discussions, networking)

🕐 10:00 - 10:30 REGISTRATION & COFFEE
🕐 10:30 - 12:00
- The story continues: HKHLR - Hessian Competence Center for High Performance Computing (C. HEILIGER)
- The Hessian Hardware infrastructure for HPC viewed from a German perspective (D. STERNEL)
- Application procedure for computing time (A. WOLF, D. STERNEL)

🕐 12:00 - 13:00 LUNCH
SNACKS AND BEVERAGE SERVED
🕐 13:00 - 15:00
- Presentation of HPC projects on Hessian clusters

🕐 15:00 - 15:30 COFFEE BREAK
🕐 15:30 - 17:00
- Recent trends in scientific HPC - methods and hardware (C. IWAINSKY, A. WOLF)

🕐 17:00 - 18:00 GET-TOGETHER
SNACKS AND BEVERAGE SERVED

ATTENDANCE FEE: 15 EURO

Wednesday, Sept. 28
🕐 08:30 - 18:00
S4|22 ROOM 5 (LANDWEHRSTRASSE 48A)

Thursday, Sept. 29
🕐 08:30 - 18:00

Module 2: Software Tools for Unix/Linux Systems
PROF. C. HASSE (TU BERGAKADEMIE FREIBERG) AND STAFF

This two-day course consists of lectures supplemented with practical exercises.
CONTENT:
- Introduction to Unix
- Shell, Bash Basics
- Regular Expressions
- Editor VIM
- Shell Scripting
- Sed, awk
- Compiler
- Make, debugging, profiling
- Documentation, visualization
- GIT

PREREQUISITES: For the tutorials all participants are kindly asked to use their own laptop (Linux or Max OS X). (Eduroam WLAN access is available).

ATTENDANCE FEE: 30 EURO, INCL. EVENING EVENT

Wednesday, Sept. 28
🕐 08:30 - 18:00
S4|22 ROOM 6 (LANDWEHRSTRASSE 48A)

Thursday, Sept. 29
🕐 08:30 - 18:00

Module 3: OpenACC
NVIDIA TRAINERS

This two-day course consists of lectures supplemented with practical exercises.
CONTENT:
The course gives an introduction to OpenACC. You can learn how to programm OpenACC and how to accelerate your code with OpenACC.

PREREQUISITES: Participants need basic programming skills on Linux/Unix systems with C++ and some experience in programming. For the excercises all participants are kindly asked to use their own laptops (Eduroam WLAN access is available).

ATTENDANCE FEE: 30 EURO, INCL. EVENING EVENT

Evening event of module 2 & 3
🕐 19:00 (WEDNESDAY)

Friday, Sept. 30
🕐 09:30 - 13:30
S4|22 ROOM 5 (LANDWEHRSTRASSE 48A)

A coffee break is included in the program and will be scheduled by the trainers. No lunch!

Module 4:
Introduction to the TotalView Debugger

HKHLR STAFF

This course consists of lectures supplemented with practical exercises.

PREREQUISITES: For the tutorials all participants are kindly asked to use their own laptop (Eduroam WLAN access is available).

NO ATTENDANCE FEE

All modules can be booked spearately. Please be aware that module 3 should be only booked by persons with programming experience.

September 22, 2016

Hessisches Kompetenzzentrum für Hochleistungsrechnen

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