

On behalf of HPC.NRW a **state-wide helpdesk** has been established.

Topics handled by this helpdesk are the following ones:

- **General support**
- **Courses and workshops**
- **Method-oriented, business-oriented and subject-oriented consulting**

Everyone in NRW related to HPC topics has the right to use the support.

The service is **for free**; no fees have to be paid.

For HPC user in NRW without own HPC institution, there exist **two ways** of creating a **support request** in the HPC.NRW network:

1. If the user already uses the infrastructure of a **certain HPC location**, he should use the **support network** belonging to this institution.
2. If the user does not use an HPC system of an HPC.NRW partner yet, he could send his request to **helpdesk@hpc.nrw**.

This is the official support e-mail-address of HPC.NRW and the sender will receive an answer after 72 hours at latest.

It is also possible to contact the local support in either Aachen, Cologne or Paderborn.

Contact details could be found on:

<https://hpc.dh.nrw/de/ziele/massnahmen/allgemein-1-1-3-1>



NETZWERK &
INFRASTRUKTUR

SERVICE & SUPPORT

SOFTWARE & BETRIEB

HPC NUTZUNG

Standort	Kontakt	Support-Webseite
RWTH Aachen University	servicedesk@itc.rwth-aachen.de	www.itc.rwth-aachen.de/hpc-projects

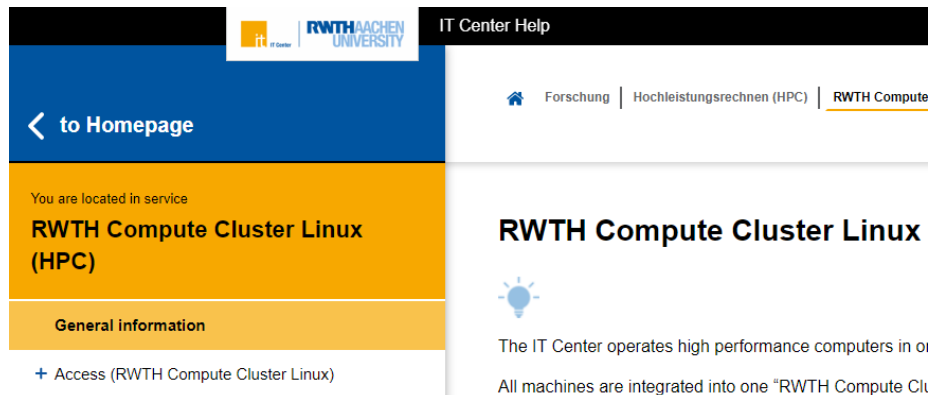
Aachen is known for its expertise regarding **engineering**.

Local support could be reached via:

servicedesk@itc.rwth-aachen.de

Local support website is:

<https://help.itc.rwth-aachen.de/service/rhr4fjjutttf/>



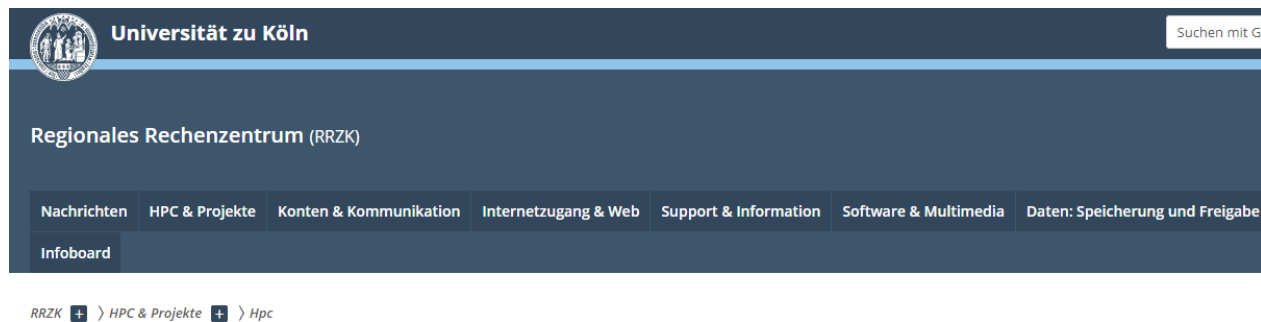
Cologne is known for its expertise regarding **life science**.

Local support could be reached via:

hpc-mgr@uni-koeln.de

Local support website is:

rrzk.uni-koeln.de/hpc-projekte/hpc



High Performance Computing (HPC)

Hpc

Kontakt



RRZK
Gebäude 133
Weyertal
121 50931 Köln
Tel. +49 221
/ 470-89555 E-Mail: RRZK-Helpdesk

Kontaktformular RRZK-
Helpdesk

Universität zu Köln

Social-Media-Kanäle der Universität zu Köln



Paderborn is known for its expertise regarding **chemistry, physics, mathematics and computer science**.

Local support could be reached via:

Pc2-support@uni-paderborn.de

Local support website is:

<https://pc2.uni-paderborn.de/go/access>

ABOUT PC ²	RESEARCH	TEACHING	HPC SERVICES	JOB
<div><div>SERVICES<ul style="list-style-type: none">→ System Access Application→ HPC and Domain-Specific Consulting→ User Support→ Documentation→ Forms and Regulations</div><div>SYSTEMS<ul style="list-style-type: none">→ System Status Dashboard→ Overview→ Noctua→ OCuLUS→ Pling3→ FPGA Research Clusters</div><div>TRAININGS<ul style="list-style-type: none">→ HPC Courses→ Linux Introduction Course→ HPC Introduction Course→ Advanced Topics of HPC→ Performance Engineering Course→ Specialized Courses→ HPC Calendar of the Gauss-Alliance</div></div>				

Contact

Postal Address	Universität Paderborn <i>Paderborn Center for Parallel Computing</i> Warburger Str. 100 33098 Paderborn Germany
Telephone	+49-5251-60 1735
Telefax:	+49-5251-60 1714
Location	University Campus, building O, Pohlweg 51
Website	https://pc2.uni-paderborn.de
E-mail	pc2-info(at)uni-paderborn(dot)de for administrative purposes pc2-support(at)uni-paderborn(dot)de for technical purposes pc2-cert(at)uni-paderborn(dot)de for security purposes

The general support includes all **high level HPC questions**:

- Availability of HPC resources
- Application of computing time
- Small issues regarding HPC calculations
- General questions

An important part of HPC.NRW is the functional education of HPC user →

Creation of an **HPC Wiki**: <https://hpc-wiki.info/>



The screenshot shows the HPC Wiki homepage. At the top left is the 'HPCWIKI' logo with three blue arrows pointing right. To its right are two tabs: 'Hauptseite' and 'Diskussion'. Below the logo is a sidebar menu with the following items: 'Grundlagen', 'Alle Einträge in Basics', 'Erste Schritte', 'Muschel', 'Ssh', 'Dateiübertragung', 'Module', 'Scheduling-Grundlagen', 'HPC-Wörterbuch', and 'Wie google'. The main content area has the title 'HPC Wiki' followed by a horizontal line. Below the title is a welcome message: 'Willkommen im HPC Wiki als Quelle für standortunabhängige High Performance Computing-Informationen.' and a note: '<<-- Auf der linken Seite gibt es verschiedene Zielgruppen mit ihrem jeweiligen Material.' At the bottom of the main area is a box titled 'Inhalt' containing a numbered list: '1 Zielgruppen', '2 Kategorien', '3 Kommende HPC-Veranstaltungen (Quelle: HPC-Kalender der Gauß-Allianz)', and '4 Übersicht'.

HPCWIKI

Hauptseite Diskussion

HPC Wiki

Willkommen im [HPC Wiki](#) als Quelle für standortunabhängige High Performance Computing-Informationen.

<<-- Auf der linken Seite gibt es verschiedene Zielgruppen mit ihrem jeweiligen Material.

Inhalt

- 1 Zielgruppen
- 2 Kategorien
- 3 Kommende HPC-Veranstaltungen (Quelle: HPC-Kalender der Gauß-Allianz)
- 4 Übersicht

As part of the HPC Wiki, **three online tutorials** have been created:

1. Introduction to Linux in HPC: https://hpc-wiki.info/hpc/Introduction_to_Linux_in_HPC

Lehrplan

1. Hintergrund und Geschichte
2. Die Befehlszeile
3. Linux-Verzeichnisstruktur
4. Dateien
5. Textanzeige und -suche
6. Benutzer und Berechtigungen
7. Prozesse
8. Der vim Texteditor
9. Shell-Skripting
10. Umgebungsvariablen
11. Systemkonfiguration
12. SSH-Verbindungen
13. SSH: Grafik und Dateiübertragung
14. Verschiedene Tipps

2. Gprof Tutorial: https://hpc-wiki.info/hpc/Gprof_Tutorial



INTRODUCTION



Gprof is a free profiler from GNU

- simple way to analyze runtime behaviour of an application
(low overhead, collect various meaningful insights)
- determine where most of the execution time is spent
⇒ locate code regions suited for optimization
- analyzes connections between individual functions

3. OpenMP in Small Bites: https://hpc-wiki.info/hpc/OpenMP_in_Small_Bites

Lehrplan

1. Übersicht
2. Worksharing
3. Data Scoping
4. Falsche Freigabe
5. Tasking
6. Tasking und Data Scoping
7. Tasking und Synchronisation
8. Schleifen und Aufgaben
10. Aufgabenplanung
11. Ungleichmäßiger Speicherzugriff

The Gauß-Allianz HPC calendar includes all **HPC related courses and workshops**:

<https://hpc-calendar.gauss-allianz.de/>






Gauß-Allianz HPC-Kalender

22 events from today, 31.5.2021

« Previous 1 2 3 4 5 Next »

Monday, May 31, 2021

Dashboards for science (ONLINE course)


-  Monday, May 31, 2021, 10:00 AM - Friday, June 11, 2021, 4:00 PM
-  Jülich Supercomputing Centre • Wilhelm-Johnen-Straße, 52425 Jülich
-  Jülich Supercomputing Centre (JSC)  English  Beginner

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
2021 June

>

Mon	Tue	Wed	Thu	Fri	Sat	Sun
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4
5	6	7	8	9	10	11



Start date



End date

Categories ▾

Language ▾

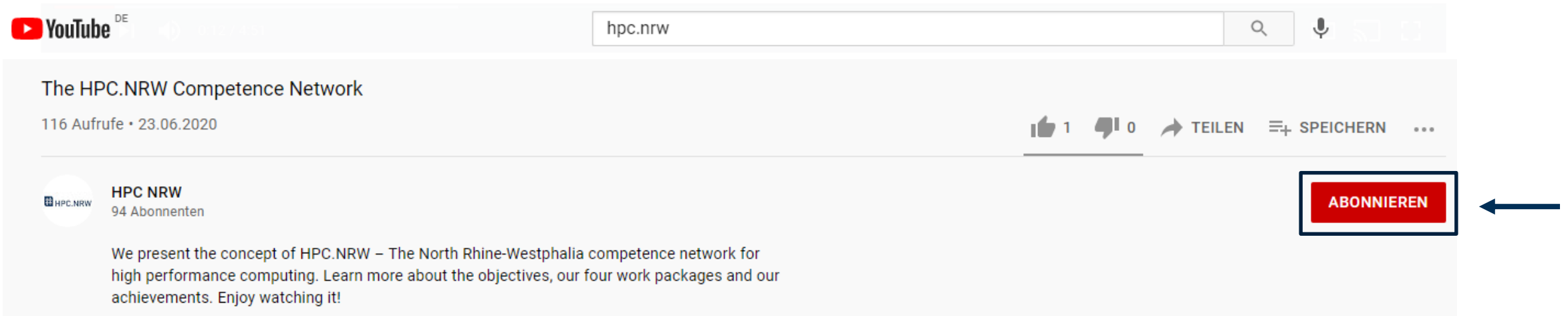
Search in title and text

Location ▾

Courses and workshops – HPC.NRW on youtube

All relevant HPC.NRW information could be found on youtube as well:

<https://www.youtube.com/watch?v=IfD9IPixgpo>



The screenshot shows a YouTube video player interface. At the top, the YouTube logo is on the left, and a search bar with 'hpc.nrw' is on the right. Below the search bar, the video title 'The HPC.NRW Competence Network' is displayed, followed by '116 Aufrufe • 23.06.2020'. To the right of the title are icons for likes (1), comments (0), share (TEILEN), save (SPEICHERN), and a menu icon. Below the title, the channel name 'HPC NRW' is shown with a profile picture and '94 Abonnenten'. A description follows: 'We present the concept of HPC.NRW – The North Rhine-Westphalia competence network for high performance computing. Learn more about the objectives, our four work packages and our achievements. Enjoy watching it!'. On the right side of the video player, there is a red button labeled 'ABONNIEREN' (Subscribe), which is highlighted with a blue rectangular box and a blue arrow pointing to it from the right.

The categories for method-oriented consulting are based on the „ACM Computing Classification System“.

The method-oriented consulting includes the following areas:

Parallel programming	Data science and machine learning
Performance analysis and optimization	Computational analytics
Correctness analysis	Data science tools
Simulation types and modeling methodologies	Visualization
Modeling and simulation tools	Security and highly sensitive data

4.5 Business-oriented consulting

The business-oriented consulting includes the following areas:

Monitoring	Workload management
Accelerators	Compute-time proposals
CPU architectures	User management and accounting
Storage systems	Interconnects
File systems	Aquisitions/ tenders
Facility	Courses and workshops
User software installation	Interactive services
Research data	Cloud-computing
System Software	Grid-computing
High availability solutions	Virtualization

4.6 Subject-oriented consulting

The subject-oriented consulting is based and aggregated on the DFG categorization:

Economics	Mathematics
Medicine/ Genetics/ Bioinformatics	Geoscience
Physics	Chemistry
Computer Science	Engineering