

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**
- **Community-specific in-depth 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. Relevant information can be found here:

<https://hpc.dh.nrw/en/support/concept>

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**.

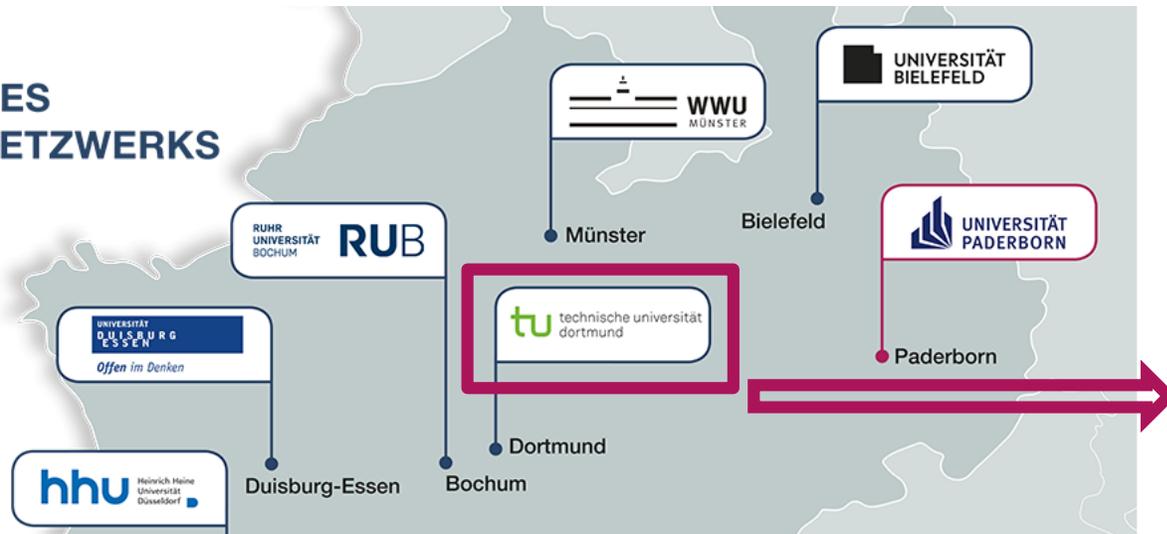
This is the official support e-mail-address of HPC.NRW and the sender will receive an answer after 72 hours at latest.

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/support/concept/local-support-teams>

STANDORTE DES KOMPETENZNETZWERKS HPC.NRW



Technische Universität Dortmund

 service.limc@tu-dortmund.de

 <https://www.lido.tu-dortmund.de/>



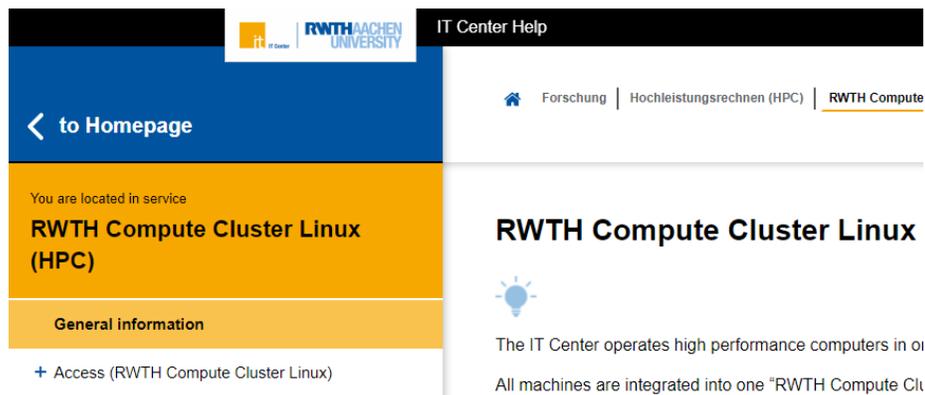
Aachen is known for its expertise regarding **engineering**.

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



The screenshot shows the website for the Regional Computing Center (RRZK) at the University of Cologne. The header includes the university logo and name, a search bar, and the title 'Regionales Rechenzentrum (RRZK)'. A navigation menu contains links for 'Nachrichten', 'HPC & Projekte', 'Konten & Kommunikation', 'Internetzugang & Web', 'Support & Information', 'Software & Multimedia', and 'Daten: Speicherung und Freigabe'. An 'Infoboard' is also visible. At the bottom, a breadcrumb trail reads 'RRZK > 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
SERVICES <ul style="list-style-type: none">→ System Access Application→ HPC and Domain-Specific Consulting→ User Support→ Documentation→ Forms and Regulations		SYSTEMS <ul style="list-style-type: none">→ System Status Dashboard→ Overview→ Noctua→ OCuLUS→ Pling3→ FPGA Research Clusters		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

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 X, Mersinweg 5
Website	https://pc2.uni-paderborn.de
E-mail	pc2-info@uni-paderborn.de for administrative purposes pc2-support@uni-paderborn.de for technical purposes pc2-cert@uni-paderborn.de for security purposes

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

- Availability of HPC resources
- Application of computing time
- Code optimization
- General issues

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 website interface. On the left is a sidebar with the HPCWIKI logo and a navigation menu. The main content area has a header with 'Main page' and 'Discussion' tabs, followed by the title 'HPC Wiki' and a welcome message. Below the welcome message is a 'Contents' section with a list of links.

HPCWIKI

Select Institution ▼

- Basics
 - All entries in Basics
 - Getting Started
 - Shell
 - ssh
 - File Transfer
 - Modules
 - Scheduling Basics
 - HPC-Dictionary

Main page Discussion

HPC Wiki

Welcome to the [HPC Wiki](#) the source for site-independent High Performance Computing Information.

<<-- On the left hand there are different target groups with their respective material.

Contents [hide]

- 1 [Target Groups](#)
- 2 [Categories](#)
- 3 [Upcoming HPC Events \(Source: HPC Calendar of the Gauss-Alliance\)](#)
- 4 [Overview](#)

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

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

Syllabus

1. Background and History
2. The Command Line
3. Linux Directory Structure
4. Files
5. Text display and search
6. Users and permissions
7. Processes
8. The vim text editor
9. Shell scripting
10. Environment variables
11. System configuration
12. SSH Connections
13. SSH: Graphics and File Transfer
14. Various tips

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

Syllabus

1. Overview
2. Worksharing
3. Data Scoping
4. False Sharing
5. Tasking
6. Tasking and Data Scoping
7. Tasking and Synchronization
8. Loops and Tasks
9. Tasking Example: Sudoku Solver
10. Task Scheduling
11. Non-Uniform Memory Access

4. **GPU Tutorial:** https://hpc-wiki.info/hpc/GPU_Tutorial

- Consists of **5 sections**
- Each tutorial consists of a **short video**, a couple of quiz questions, and some practical **exercises**.

Syllabus

1. Introduction
2. Several Ways to SAXPY: CUDA C/C++
3. Several Ways to SAXPY: OpenMP
4. Several Ways to SAXPY: Julia
5. Several Ways to SAXPY: NUMBA

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

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

Gauß-Allianz HPC-Kalender

40 events from today, 13.6.2022

« Previous 1 2 3 ... 8 Next »

Monday, May 16, 2022

HPC-Cluster - Aufbau & Betrieb (ONLINE)

Monday, May 16, 2022 - Monday, July 4, 2022

Supercomputing-Akademie

Supercomputing-Akademie c/o Höchstleistungsrechenzentrum Stuttgart German

Monday, June 13, 2022

Simulation - Grundlagen & CFD (ONLINE)

Monday, June 13, 2022 - Monday, July 25, 2022

Supercomputing-Akademie

Supercomputing-Akademie c/o Höchstleistungsrechenzentrum Stuttgart German

< 2022 June >

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	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

Start date

End date

Categories ▾

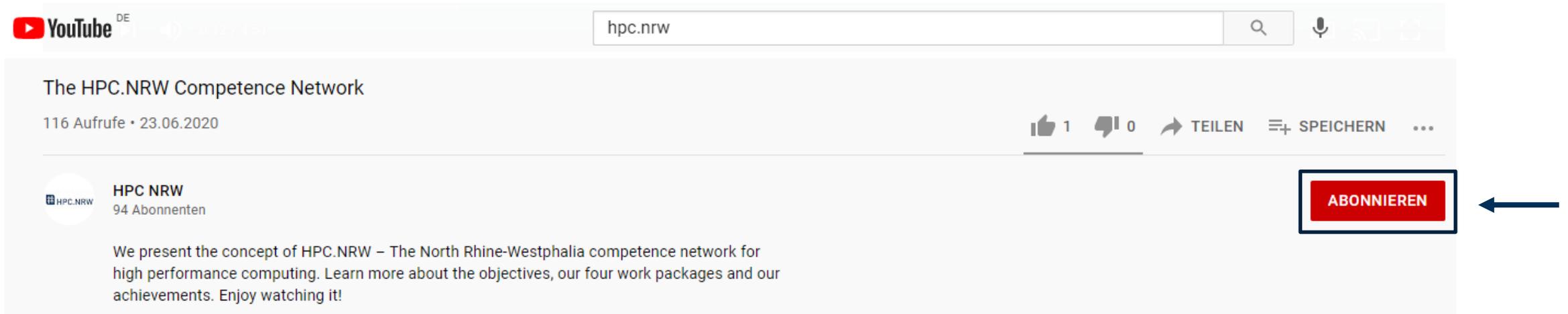
Language ▾

Search in title and text

Location ▾

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 and search bar are visible, with 'hpc.nrw' entered in the search bar. Below the search bar, the video title 'The HPC.NRW Competence Network' is displayed, along with '116 Aufrufe • 23.06.2020'. The video player area is mostly blank. Below the video player, the channel information for 'HPC NRW' is shown, including '94 Abonnenten' and a description: '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!'. To the right of the channel information, there is a red 'ABONNIEREN' button, which is highlighted with a black border and a blue arrow pointing to it from the right.

- Additionally, to the usual support structures provided by HPC.NRW, a special in-depth consulting service is offered.
- **Channels** for placing a request **identical** to those for the **general support**.
- This service extends **much further** than standard support.
- Specific consultations available **for challenging research projects** → spans HPC-methods, the operation of HPC-systems, and research-oriented issues.
- Support for reaching the **next Tier-level**