



TECHNISCHE  
UNIVERSITÄT  
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**RWTH**AACHEN  
UNIVERSITY

# HPC Introduction 2024

Tim Cramer

GREAT COMPUTING COMES WITH GREAT SUPPORT.

# Why is this event?

- Long tradition in parallel programming courses (e.g., PPCES)
  - How to introduce new users?
  - How to cover high-level overview on HPC?
  - How to reach domain scientists who “only” use a parallel software without programming?
  - How to address the “decision makers”?
- Solution: Separated event (this one)
- Follow-up event PPCES (11.03.24 - 15.03.24): <http://www.itc.rwth-aachen.de/ppces>
- VI-HPS Porting and Tuning Workshop 2024 (26.02.24 – 01.03.24):  
<https://blog.rwth-aachen.de/itc-events/event/vi-hps-porting-and-tuning-workshop-2024/>
- Consultation hours (every third Thursday of month):  
<https://blog.rwth-aachen.de/itc-events/hpc-consultation-hour/>

## Part I

basic information about  
HPC **resources**

*Monday*

13:30 - 13:35	Welcome Day 1	Tim Cramer
13:35 - 14:05	HPC Architecture Basics and RWTH Resources	Tim Cramer
14:05 - 14:35	Storage Strategy for HPC Users	Philipp Martin
14:35 - 14:40	Break	
14:40 - 15:25	NHR and RWTH Computing Projects	Tim Cramer
15:25 - 16:00	Introduction to JupyterHub	Alvaro Frank

## Part II

basic information about  
HPC **usage**

*Tuesday*

09:00 - 09:05	Welcome Day 2	Tim Cramer
09:05 - 09:35	Access to CLAIX and Using multi-factor Authentication	Tim Cramer
09:35 - 10:05	Cluster Software Environment HPC	Felix Tomski
10:05 - 10:45	Introduction to Slurm	Alvaro Frank
10:45 - 11:00	Break	
11:00 - 11:45	Parallel Programming Overview	Tim Cramer
11:45 - 12:30	Performance Metrics & Measurements	Felix Tomski
12:30 - 12:45	Closing Session	Tim Cramer

- Please feel free to ask questions by
  - using the Zoom Q&A feature (preferred over the chat window)
  - by raising your hand 