# **High-Performance Computing Group**

Prof. Dr. Christian Plessl

Computer Science Department and Paderborn Center for Parallel Computing





# **Evaluation for optimizing access methods to PC2 services**

# **Student Position**

At a glance

- Evaluate the status quo and improve the user experience of PC2 services
- Contribute to the development of the PC2 user portal and implement new processes

# • Learn how our (cooperative) application system works

- Cooperate with other High-Performance Computing (HPC) centers
- Work with various security-related technologies such as MFA, VPN, SSH, etc.

In order to offer our customers the best possible service, we need to constantly analyze and improve our internal and externally visible processes.

This includes, for example, the request for computing resources in our application system or the various types of access to our HPC systems.

In order to optimize these processes, a detailed evaluation of the current status, including suggestions for optimization, is necessary.

## Tasks and opportunities

- Detailed evaluation for use of PC2 services from the user's perspective
- Collaboration with other HPC centers
- Introduction of new technologies such as multi-factor authentication (MFA)
- Bring your own ideas to the project

# The focus for the evaluation is primarily on the following topics

- Process for applying for an PC2 account
- Process for applying for membership of a compute time project
- Changing the password for an account
- Possibilities for data transfer between filesystems/HPC systems/HPC centers
- Possible solution for multi-factor authentication
- How understandable is our documentation for new users with no previous experience?

## **Recommended skills**

- Basic Linux knowledge
- Ability to work independently and in a team
- Security-oriented mindset

### Contact:

Marcel-Brian Wilkowsky, E-Mail: marcel.wilkowsky@uni-paderborn.de