HPC Compute Time Extension
”‘Title of your Project”’

Your Name

December 19, 2023

- *Note: Fill-out hints are given in italic. Please remove in the final version. If you are unsure or have questions please contact pc2-support@uni-paderborn.de.*
- *This template is for normal or large projects that apply for an extension.*
- *Please note that extensions for up to 25% of the project runtime or resources can be requested informally from pc2-support@uni-paderborn.de with a short explanation instead.*
- *The information provided here will not be made public. It will only be accessible for PC2 staff for the review process and support, the ressource allocation board of PC2, the external scientific reviewers, the NHR Nutzungsausschuss which is a joint NHR board that approves large NHR projects as well as the NHR Geschäftsstelle (for reporting purposes).*
- *Your previous compute-time proposal and the detailed description are considered as part of this proposal so you don't have to repeat yourself. It is assumuned that the core of the project stays the same. Also, it is assumed that all aspects not discussed here stay the same compared to the previous proposal.*

1 Progress Report

1-2 pages in total.

1.1 Project Progress

Shortly describe the progress and accomplishments of your project here including references to your publications.

1.2 Project Challenges

Please describe how the scientific challenges of the project were tackled and solved here.

1.3 Problems Encountered

Please describe the technical, scientific or organizational problems encountered during the project duration here.

1.4 Suggestions for Improvements for PC2 Services

Please let us know here, which hardware, software or services would have been helpful for your problems or how else PC2 could improve for you as a scientist.

1.5 List of Publications

List of publications (marked as published, accepted, and submitted). Members of Paderborn University should input their publications in RIS (https://ris.uni-paderborn.de/) and can input an exported list here.

1.6 List of Thesis

List of thesis (marked as bachelor, master, PhD, ..)

2 Description of the Project Extension

In case some aspects changes compared to the previous project phase, please discuss them here, e.g.

- *Scientific questions you want to address*
- *Scientific objectives*
- *Computational objectives*
- *Approach and expected outcome*
- *Expected impact on the research area*
- *Scientific and technical impact*
- *Progress beyond the state-of-the-art*

3 Justification of Requested Resources

3.1 Estimation of Resources

Justify here your requested resources by filling out the following table.

Run type			Total/sum
Total/sum			
Programs used			
Cluster name			
#runs			
#steps per run			
Wall time per step [hours]			
Type of resource (CPU type, GPU type, FPGA type)			
CPU-Core hours			
Accelerator-hours (GPUs or FPGAs)			
Disk storage in GB			
Comment			

3.2 Schedule for Resources Usage

Describe here the planned schedule for using the resources by filling out the table. We encourage a continuous usage of resources during the project runtime. In case of a multi-year project please include a tablÃ¶e for each year.

Project month	Run types	CPU-Core-Hours	GPU types and GPU-hours	FPGA types and FPGA-hours
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
total				

4 Special Resource and Support Requirements

Discuss for example the following questions:

- *Will your application benefit from FPGAs or GPUs?*
- *What is the major bottle neck in your current use of HPC systems?*
- *Any special need for large scale pre- or postprocessing?*
- *Do you have special requirements for your workflow?*
- *Do you require special capacities for data transfer?*

References

[1] *Programming languages - C++, ISO/IEC 14882*,