### HPC-Project Status\* „Title of Project“ (acronym, if known)

Your Name

April 11, 2024

# 1 Goal of the project (global)

Please describe here shortly the scientific goal of the project

# 2 Status of the project

## 2.2 Previous scientific results

Please give a short description of the current scientific results of your project that you have got in the context of usage of the high performance computers at TUD.

## 2.2 References

Please tell us if you have published some papers in that period under report and the papers present results of the consumed CPU time.\*

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

# 3 Plan

## 3.1 Next steps in this project

Please describe here the next steps / working plan of the project that you would like to solve with the compute power at TU Dresden

## 3.2 Applied resources

Based on the knowledge of the type and quantity of resources used, please justify the newly requested resources. This concerns CPU and GPU time as well as disk space

For 3.1+3.2, it may help to divide the work into work packages, for which the resources are listed individually, preferably in tabular form, and then briefly explained

Example:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Work packages (WP) | CPUh | GPUh | disk  [GB] | temporärer Workspace  [GB] | max. number CPU/Job | max. number GPU/Job |
| 1 | 100.000 | - | 100 | 1000 | 500 | - |
| 2 | 50.000 | 10.000 | 80 | 100 | 200 | 100 |
| …. |  |  |  |  |  |  |

Justification:

WP1: Extensive parameter studies…

WP2: The calculations use complex simulation models XY and YZ. The following scenarios are simulated:

o Testing with few, then many nodes

o Variation of runtime length on maximum number of nodes

o Stress tests on as many different CPU/GPU generations as possible….