Application for a Computing Time Project on the RWTH Compute Cluster

New project proposal / Project extension for project xxxx

Period: mmm 20yy – mmm 20yy

PROJECT NUMBER
PROJECT TITLE

Submission date

Principal investigator:

Technical contact:

Project contributors:

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1. Project Description

(1-5 pages total including …)

1.1. Introduction

Please, give a short outline of the scientific background of your research, including references. (max. 1/2 page).

Please, indicate if this application is directly related to any peer-reviewed research project (DFG, BMBF, EU, or other funding agencies). Please provide a detailed reference.

Please, indicate if you applied for or received CPU time grants at other sites. If you do, please tell us where, which system, how much CPU time and provide the project title in the project description.

1.2. Preliminary Work

Provide a brief summary of your preliminary work in connection with the proposed project, including references. (max. 1/2 page).
<list>

1.3. Project Details

Describe your proposed project in detail, structured in sub-projects, if applicable.

Please, include information about (max. 1 page (per sub-project)):

- scientific questions you want to address
- scientific goals you want to reach
- approach to reach these goals
- expected impact on the research area

1.4. Description of Methods and Algorithms

Describe the scientific and numerical methods and algorithms you are planning to use/improve/develop. (max. 1/2 page).

1.5. Code performance

Elaborate which kind of supercomputer is suitable for your proposed project and why. Include information about: (max. 1 page):

- which code will be used and describe its suitability for parallel computers: (scaling plots and table with speedup results for runs with a typical problem size of the planned project)
- describe architecture, machine/system name, and problem size used for the scaling plots

1.6. Estimated resources on the RWTH Compute Cluster

Outline the amount of resources you request for the current granting period and describe your requirements as filled in the submission form (max. 1/2 page).

If you have any special resource requirements (IO, memory, CPU, networks, others) , please provide a detailed description here.

2. Progress Report / Final Report (mmm 20yy – mmm 20yy)

In case of an application for a project extension, please include here the report of the work done in the last period (structured in sub-projects, if applicable). (about 1-4 pages)

Please, include the following information

- brief description of the (sub-) project
- scientific results obtained
- resources used
- performance, scaling behavior (if not already described in 1.6)

3. Publications from project xxxx

<list>

Peer-reviewed Publications published only.

4. Ph.D. theses completed within project xxxx

<list>

Please, give author's name and degree and the title of the thesis.

5. Additional references

<list>

6. Graphics suitable for the general public

In order to promote simulation science, we are interested in a short summary - suitable for a general audience – of your project and the achieved results. In particular, attractive color pictures of your results together a short description are desirable.
We ask your permission to use this text and these pictures in publications.