Application form Performance Engineering: hpc.bw - High Performance Computing (HPC) in Research

General information	
Project title:	
Planned project duration:	
Contact person:	E-mail:
Faculty:	Professorship:
If applicable, relation to funded research project (project title, funding institution):	

1. Description of the research project

1.1. Outline the research project for which HPC is needed (approx. 4 lines).

_____
_____
_____
_____

1.2. How/why should HPC be used for the project (approx. 4 lines)?

_____
_____
_____
_____

2. Description of the existing software that is to be optimized by means of HPC (approx. 4 lines): functionality, areas of application, etc.

_____
_____
_____
_____

3. hpc.bw support services in your project

3.1. What problems (if any) are currently present in your software (e.g. program too slow (runtime), memory consumption too high)? Can you quantify these (approx. 4 lines)? (Example: Halving the runtime is necessary to answer the research question)

_____
_____
_____
_____

3.2. What are the requirements for the software that is to be optimized, after the needed performance engineering has been carried out (approx. 4 lines)?
(Example: Software executable with data set XY; Software compatible with Windows/Linux)

_____
_____
_____
_____

3.3. In which area and to what extent do you need support from hpc.bw (approx. 4 lines)?
(Example: algorithm development; code optimization; OpenMP/MPI parallelization)

_____
_____
_____
_____

4. Self-assessment (single choice): How familiar are you with HPC and programming?

- No knowledge (you only write individual lines of a program or have no experience with programming or optimized software)
- Basic knowledge (you write parts of programs yourself, e.g. larger Excel macros, Matlab scripts or interfaces to commercial software)
- Advanced knowledge (you write your own programs/parts of programs for parallelized execution on HPC computing systems)
- Expert knowledge (you parallelize and optimize your software mostly independently and have detailed knowledge of job scheduling systems such as SLURM or PBS)

Please send the completed application form by 14.02.2025 to: info-hpc-bw@hsu-hh.de