

Thesis submission guidelines at the HPSC Lab

In addition to the submission guidelines put forth by the examination office (“Prüfungsamt”), a digital submission of your thesis is required. For this, create a folder named `thesis-YYYY-TYPE-LASTNAME`, where `YYYY` is the four-digit year of your thesis submission, `TYPE` is *ba* or *ma*, and `LASTNAME` is your last name. Note that everything is written in *lowercase*, e.g., `thesis-2025-ma-wurzelknaus`. Then, add the following files/folders:

1. The thesis PDF named `thesis-YYYY-TYPE-LASTNAME.pdf`
2. The talk PDF (if applicable) named `talk-YYYY-TYPE-LASTNAME.pdf`
3. All LaTeX documents for thesis/talk as well as all other supporting files that were necessary to create the PDFs. Keep the LaTeX directory structure intact so that the PDF can be recreated using standard LaTeX commands. Put everything in the `latex/thesis` and `latex/talk` subfolders respectively. Optimally, add a ‘Makefile’ that automatically invokes all commands to build the respective PDFs.
4. All data that went into the creation of the figures for your thesis/talk. This includes (but is not limited to)
 - each qualitative figure (e.g., contour plots from ParaView/Tecplot) with its image file,
 - each quantitative figure (e.g., 2D line plots) with its image file, its raw data file (e.g., a text file containing numerical values), and the Python/Julia script you used to generate the image.

For this, create folders named `figures/thesis` and `figures/talk`. Put all files for each figure in its own subfolder and name that subfolder after the figure number (or slide number) in your thesis/talk, e.g., `figures/thesis/fig_1.2` or `figures/talk/slide_3`. If you used other tools like Microsoft Excel or LibreOffice Calc to create the plots, create an additional file with the raw data in the CSV format. Figures that were used both in the thesis and the talk only need to be included once.

Note 1: This part is *in addition* to Item 3, i.e. do not change the figure names in your LaTeX folder but add them a second time here.

Note 2: Try to limit the size of each figure folder to 10 MB. If this is not possible, please talk to your advisor about how to proceed.

5. All numerical setups you used to produce results for your thesis/talk, including all necessary input files. First, create a folder named `simulations` and add the `Project.toml` and `Manifest.toml` files you used to generate your results. Each setup should then be put in its own subfolder that has the proper structure so that the simulations can be directly started without further modifications, e.g., `simulations/setup_1`. Add a `README.md` file that includes the information on which machine, on which hardware (CPU/GPU) and with how many cores the results were obtained. Also state which git branch/revision you used. If you simulated a single setup with many different settings (e.g., many different Mach numbers), do not create a separate folder for each but list the necessary changes in the `README.md` file or include a `run.jl` file with the necessary commands.

Source: <https://github.com/hpsc-lab/thesis-submission-guidelines>

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Last edited by: Michael Schlottke-Lakemper

6. List all git branches (and tags/versions/commit hashes, if applicable) you used to produce the results for your thesis/talk in a central `README.md` file that you put at the root of your submission folder. If these were your own branches (e.g., not explicitly shared with other users), make sure that you clean them up first:
 - Commit all changes.
 - Remove all debugging statements and commented lines if not needed anymore.
 - Add proper comments that explain the intention of your code.
7. If you used scripts/programs that were not committed to the HPSC Lab repositories, include them in your submission as well and put them in a subfolder under `tools`, e.g. `tools/extract_data`. List their purpose and how to use them in a `README.md` file.

If you added extra files or if there is anything else your advisor should note, put the information in the central `README.md` file as well. A typical submission folder could look something like this:

```
thesis-2025-ma-wurzelknaus/  
thesis-2025-ma-wurzelknaus/figures/talk/slide_2  
thesis-2025-ma-wurzelknaus/figures/thesis/fig_1.1  
thesis-2025-ma-wurzelknaus/figures/thesis/fig_1.2  
thesis-2025-ma-wurzelknaus/latex/talk  
thesis-2025-ma-wurzelknaus/latex/thesis  
thesis-2025-ma-wurzelknaus/talk-2025-ma-wurzelknaus.pdf  
thesis-2025-ma-wurzelknaus/thesis-2025-ma-wurzelknaus.pdf  
thesis-2025-ma-wurzelknaus/README.md  
thesis-2025-ma-wurzelknaus/simulations  
thesis-2025-ma-wurzelknaus/simulations/setup_1  
thesis-2025-ma-wurzelknaus/simulations/setup_2  
thesis-2025-ma-wurzelknaus/tools/extract_data
```

Once everything is collected, compress (tar-bzip or zip) the single folder with your digital submission into a file named `thesis-YYYY-TYPE-LASTNAME.tar.bz2` or `thesis-YYYY-TYPE-LASTNAME.zip`. Then, upload your submission file (e.g., `thesis-2025-ma-wurzelknaus.tar.bz2`) via the following link:

<https://scwww.math.uni-augsburg.de/nextcloud/s/SH7wG4gyPqr2RZ9>

The password is `Thesis submission 101`. *In addition*, upload just the thesis PDF as a single, uncompressed file (e.g., `thesis-2025-ma-wurzelknaus.pdf`). Once you have uploaded both files, send an email to your advisor to let them know about your submission.

At a first glance, the requirements for the digital submission might seem laborious. They are, however, crucial to ensure that your scientific effort that went into the creation of the thesis is not lost. Only by properly structuring all your results including figures, raw data, simulation setups etc. it is possible for other researchers to continue your work and to build upon your scientific achievements. If in doubt about what exactly should be included, or how the digital submission should be prepared, please do not hesitate to ask your advisor.