

## **Compact Course:** *Advanced Topics in Version Control with Git*

Date: 18.1.22 9-13 Uhr

Instructor: Dr. Dominic Kempf, Research Software Engineer, Scientific Software Center

Venue:

The course will be given as an in-person event if the Covid-19 situation permits. HeiConf will be used otherwise. A final decision with an announcement of the exact venue will be made two weeks prior to the course.

Prerequisites:

Prior knowledge about version control with Git is required. This can e.g. be acquired by attending the SSC's introductory course "Version Control with Git". This course is intended for all scientific audiences. Participants are required to bring their own laptops to work on during the course. Network access (e.g. through Eduroam) is recommended. If held online, participants are expected to have audio/video equipment to participate in a video conference (HeiConf).

Summary:

Applying version control can be a game changer for a collaborative research software project. However, even in projects that already successfully use Git, there is often room for improvement of the employed Git workflows. This workshop tries to delve into collaborative workflows using Git branches and discuss their strengths. Additionally, the course will introduce some advanced topics that increase the participants' repertoire of Git workflows: Submodules, Large File Storage and Pre-commit Hooks.

Learning objectives:

After the course participants will

- Understand git branches and typical workflows using them
- Have seen collaborative workflows on GitHub (Pull Requests, Forks etc.)
- Know about advanced Git features like submodules, large file storage
- Be able to apply pre-commit hooks for their Git repositories

Registration:

Please register using this webform: <https://ssc.iwr.uni-heidelberg.de/form/advanced-git-ws21>