**IMPRS UFAST Focus Course**

# Numerical Methods and Practical Skills for Computational Physics, Part I

## Heiko Appel

**Hands-on exercises: Heiko Appel**

### Abstract:

The focus of the first part of the course is placed on collaborative code development, project organization, automation and web presentation. The course covers an introduction to the git revision control system and collaborative code development using branches and merge/pull requests on platforms like gitlab.com or github.com. A particular focus is placed on Jupyter notebooks and Jupyter books and an automated online publishing of such content using git and contiuous integration.

This course will require some basic knowledge of Python programming [e.g. I-UF FC1-1 and FC1-2].

### Topics include:

- ➤ Introduction to revision control with git
- ➤ Continous integration
- ➤ Jupyter notebooks
- ➤ Jupyter books
- ➤ Automated online presentation of scientific content



**Online course**
**24th – 28th February 2025**
**Lecture, Hands-On: 09:00 h – 13:00 h, 14:00 h – 17:00 h**
**Register on Geventis  I-UF FC3-1**
**Registration Deadline 18th February**