

Advanced Programming, June 2 – 6, Hamburg

The 2025 School on "Advanced Programming Concepts" is the seventh in a series started in Dresden in 2011 and later continued in Dresden, Munich and Hamburg. The school is organized in the context of the [Terascale alliance](#).

The school addresses physicists with more-than-basic programming experience who want to become more efficient and proficient in programming and who want to get a more thorough understanding of concepts and techniques. Topics include:

- Principles of object-oriented design (C++, Python, Julia)
- Julia programming language (full day)
- Design patterns
- Unified modelling language
- Refactoring
- Unit testing
- Package management
- Data flow modelling
- Performance, design and parallelization

Lectures are accompanied with hands-on exercises on selected topics.

Lecturers:

- Maria Grazia Pia
- Oliver Schulz
- Stefan Kluth



<https://indico.desy.de/event/48282/>

