Helmholtz Alliance

PHYSICS AT THE TERASCALE

Advanced Methods of Software Development in High Energy Physics

27 September - 1 October 2010
TU Dresden

Software developed in high-energy physics for data analysis and theory predictions becomes more and more complex. Judging, using and developing code efficiently and successfully becomes a key ingredient in particle physics.

This workshop is meant for PhD students and post-docs who wish to broaden their view of object oriented software development techniques. Existing expertise in an object oriented programming language used in HEP, e.g. C/C++, is required.

The school comprises lectures, exercises, and training with code and design examples from HEP software, as well as creative work on standard programming problems.

Topics:

- **basics of object-oriented programming languages**
- **object-oriented paradigma**
- **good versus bad code**
- **design patterns**
- **reusable code**
- **test driven design**

Speaker:

- **B. Hegner (CERN)**
- **E. von Törne (Uni Bonn)**
- **S. Kluth (MPI München)**

Registration deadline: 15 July 2010. Please register via the school webpage.
Organising Committee: Wolfgang F. Mader, Peter Steinbach, A. Straessner
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www.terascale.de/oodesign