



# Computer-Aided Optimization of Particle Accelerators

**GSI, Darmstadt, Germany 11-13 March 2015**

## Topics include:

- Particle physics simulations for optimizing beam diagnostics
- Design and optimization of state-of-the-art accelerator elements
- Control systems interface for data acquisition and analysis
- Beam dynamics with nonlinear and collective effects
- Generation of synchrotron radiation and propagation through optical elements

More than 30,000 particle accelerators are in operation around the world, advancing research in fundamental science, medicine, and industrial applications. As the limits of technology are pushed to achieve higher intensity, energy, and efficiency, sophisticated tools are necessary for the continued optimization of these machines.

This three-day international workshop will provide an overview of computational tools currently being used to advance the state of the art in numerous aspects of accelerator physics.

In addition to invited and contributed talks, the workshop will host industry displays and a poster session. Registration is open to all; see [www.opac-project.eu](http://www.opac-project.eu) for full details.

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