

PETSc Tutorial



IT4Innovations
national
supercomputing
center

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VŠB – Technical University of Ostrava
IT4Innovations building, room 207

The **Portable Extensible Toolkit for Scientific computing (PETSc)** is a modular library for linear algebra, nonlinear solvers, time integrators, optimization, and spatial discretization. Solver configuration and diagnostics are valuable skills for users, whether calling PETSc directly or via one of many higher level packages that access PETSc solvers. This tutorial will start with an introduction to distributed memory parallel programming and the fundamental linear algebra components then proceed to principles of preconditioning and Krylov solvers, convergence diagnostics, performance analysis, and the higher level solver interfaces. It will contain hands-on exercises to build the skills necessary to evaluate methods and design solvers for complex problems in science and engineering.



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More information and registration at:
<http://prace.it4i.cz/en/PETSC-05-2015>

Deadline for registration: **May 17, 2015**



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