



Srikanth Sathyanarayana

Garching near Munich, 18 September 2024

Certificate of Attendance

Srikanth Sathyanarayana has attended the following 2 days on-site course at LRZ in Garching near Munich on 17 – 18 September 2024, 09:00 – 17:00 CEST:

Iterative Solvers for Linear Systems

The focus of this on-site course is on modern iterative solvers for large linear systems of equations. Thereby, beside classical schemes and fundamentals of multigrid techniques different modern Krylov subspace methods (CG, GMRES, BiCGSTAB, ...) as well as highly efficient preconditioning techniques are presented in the context of real life applications. Hands-on sessions allow users to immediately test and understand the basic constructs of iterative solvers.

Topics covered include:

- Consistency and Convergence
- Jacobi Method
- Gauß-Seidel Method
- Relaxation Schemes
- Method of Steepest Descent
- Method of Conjugate Gradients
- Introduction to Multigrid Methods
- GMRES and BICG
- Variants of BICG
- Preconditioning

The lectures were given by Prof. Dr. Andreas Meister (University of Kassel).

The lectures were interleaved with many hands-on sessions using MATLAB or GNU Octave (net total of 12 hours).

Dr. Volker Weinberg
Head of Education and Training

