



DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service



Leibniz
Universität
Hannover

Indo-German Workshop on

**Efficient Linear Solves
for
Model Order Reduction (MOR)**

Supported by
DAAD, IIT Indore, LU Hannover

Dates

5th December – 7th December 2023

Venue

Welfengarten 1, LU Hannover

To register email to kahuja@iiti.ac.in
Online streaming at <https://iiti.webex.com/meet/kahuja>

Organizers

Prof. Dr. Kapil Ahuja, IIT Indore, India

Dr. Ahuja is working as a Professor in Computer Science and Engineering at IIT Indore (India). Earlier, he completed a postdoc from the Max Planck Institute in Magdeburg (Germany) and double Master's plus Ph.D. from Virginia Tech (USA). Recently, he has been a visiting professor at IMT Atlantique (France), TU Braunschweig (Germany), TU Dresden (Germany), Sandia National Labs (USA). His research interests are in Machine Learning, Economics of Network, Numerical Linear Algebra, and Optimization. His current emphasis has been on efficient machine learning algorithms for plant and cancer studies; game theoretic approaches to social cloud and poverty reduction; and stability analysis of model reduction algorithms for exascale machines.



Prof. Dr. Thomas Wick, LU Hannover, Germany

Dr. Wick is a Professor for Scientific Computing at the Institute of Applied Mathematics of the Leibniz Universität Hannover (Germany). Earlier, he completed a postdoc from The University of Texas at Austin (USA) and Ph.D. from Heidelberg University (Germany). His research interests are in Design, Implementation and Analysis of Numerical Methods and Algorithms for Computational Fluid Dynamics, Solids, Multi-physics and Crack Propagation problems in Elasticity and Poro-elasticity. He is also interested in Error Estimation and Adaptive Methods such as local mesh adaptivity with a particular emphasis on goal-oriented techniques.



Prof. Dr. Marc C. Steinbach, LU Hannover, Germany

Dr. Steinbach is a Professor for Algorithmic Optimization at the Institute of Applied Mathematics of the Leibniz Universität Hannover (Germany). Earlier, he completed a postdoc from the Zuse Institute Berlin (Germany) and Ph.D. from Heidelberg University (Germany). His research interests are in Applied Mathematical Optimization, specifically in developing robust and efficient algorithms and software for important classes of large-scale problems from business and industry. His current emphasis is on optimization of nonlinear network flows and on multistage stochastic programming.



Training Program Schedule

Lectures	Date & Time	Topic
Lecture-1	5 December 2023 12:00 pm to 12:50 pm Room g005	Preconditioner Updates of Linear Solves in Non-Parametric Linear MOR
Lecture-2	5 December 2022 1:00 pm to 1:50 pm Room g005	Stability Analysis of Linear Solves in Non-Parametric Linear MOR
Lecture-3	6 December 2022 2:15 pm to 3:00 pm Room g005	Preconditioner Updates of Linear Solves in Parametric Linear MOR
Lecture-4	6 December 2022 3:00 pm to 3:45 pm Room g005	Stability Analysis of Linear Solves in Parametric Linear MOR
Lecture-5	7 December 2022 12:00 pm to 1:00 pm Room b305	Preconditioner Updates and Stability Analysis of Linear Solves in Non-Parametric Bi-Linear MOR