

Indo-German conference on
Computational Mathematics (IGCM-2023)
Challenges and opportunities towards scientific computing and machine learning

March 27-30, 2023, Department of Computational and Data Sciences, IISc, Bangalore, India

OBJECTIVE

This Indo-German conference aims to provide an interdisciplinary platform for researchers to present and discuss the most recent innovations, trends, and challenges in the frontier areas of computational mathematics. IGCM aims to foster interactions among the Scientific Computing and Machine Learning research communities and to provide a platform to present and discuss challenges and opportunities in combining process and data-driven modeling. The conference topics include but are not limited to the numerical analysis of partial differential equations (PDEs) & stochastic PDEs, high-dimensional problems, efficient and robust numerical schemes for solving complex problems, optimal control and inverse problems, scalable parallel algorithms, and hardware-aware scientific computing.

FOCUSED TOPICS

Numerics of PDE's

Scientific machine learning

High performance computing

PDE constrained optimization

Data & process-driven modelling

Heterogeneous Computing

Uncertainty quantification

Physics-informed neural networks

Hybrid parallel algorithms

CONFERENCE ORGANISERS

Prof. Sashikumar Ganesan
CDS, IISc, Bangalore

Prof. Peter Bastian
IWR, Uni Heidelberg, Germany

SPEAKERS

Prof. Robert Strzodka
University of Heidelberg, Germany

Prof. Oriol Vendrell
University of Heidelberg, Germany

Prof. Vincent Heuveline
University of Heidelberg, Germany

Prof. Guido Kanschat
IWR, University of Heidelberg, Germany

Prof. Jakob Zech
IWR, University of Heidelberg, Germany

Prof. Dominik Göddeke
University of Stuttgart, Germany

Prof. Alexander Heinlein
TU Delft, Netherlands

Prof. Vadym Aizinger
University of Bayreuth, Germany

Dr. Chiranjib Sur
Shell, R&D-India

Dr. Suranjan Sarkar
Shell, R&D-India

Dr. Subodh Madhav Joshi
Shell, R&D-India

Prof. Praveen Chandrashekar
TIFR CAM

Prof. Nagaiah Chamakuri
IISER TVM

Speakers from Intel & NVIDIA

CALL FOR PARTICIPATION

Interested researchers are encouraged to submit one page abstract for oral or poster presentation. Only accepted abstracts will be considered for presentation.

IMPORTANT DATES

Last date for abstract submission:	30.1.2023
Intimation of accepted abstracts:	04.2.2023
Last date for early registration:	21.2.2023
Beginning of conference:	27.3.2023

REGISTRATION DETAILS



Registration Fee

Indian participants:	4000 INR
Indian students:	2000 INR
Others:	100 Euros

Late Registration

Indian participants:	6000 INR
Others:	150 Euros

CONTACT

Convener,
IGCM-2023
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