

**A Brief report**  
**on**  
**Advanced Workshop on**  
*Mathematical Foundation of Advanced Finite Element Methods*  
**(MFAFEM-2013)**



Workshop participants

The Department of Mathematics in collaboration with National Mathematics Initiative (NMI), National Board for higher mathematics (NBHM) and National Programme on Differential Equations: Theory, Computation and Applications (NPDE-TCA), IIT Bombay, organized a 9-day international level advanced workshop on “**Mathematical Foundation of Advanced Finite Element Method**” during December 26, 2013-January 03, 2014.

The workshop was inaugurated by Prof. Amiya K Pani, Institute chair Professor, Department of mathematics, Industrial mathematics group, IIT Bombay. The Guest of Honor was Dr Tirupathi Gudi, Assistant Professor, Department of mathematics, Indian Institute of Science, Bengalure. This workshop was intended to bring together and train the researchers in the area of computational partial differential equations.

The following eminent mathematicians were the resource persons:

- Prof. Amiya K Pani, IIT Bombay

- Prof. Carsten Carstensen, Humboldt University of Berlin, Germany
- Prof. Jay Gopalakrishnan, Portland State University, U.S.A.
- Prof. Neela Nataraj, IIT Bombay
- Dr P. Dhanumjaya, BITS-Goa
- Dr. Anil Kumar, BITS-Goa

There were 30 participants from different parts of India including few research scholars from Humboldt University of Berlin, Germany also. During the workshop, the demonstrations on various techniques involved in finite element methods have been presented. Most of the talks touched the extent of latest discoveries in the field. The informal feature of the workshop made it possible to have intensive discussions and interactive dialogues. There were tutorial sessions all through the workshop in CC lab.

The participants were greatly satisfied by the inspiring and refreshing atmosphere of the workshop. Moreover, the resource persons provided a very convenient and stimulating environment during the lectures as well as problem solving sessions. Convener Dr Dhanumjaya and the co-convener Dr Anil Kumar coordinated the event as professionally as possible.

The workshop got concluded with very informal valediction on 3<sup>rd</sup> January - 2014 in the afternoon.