INDIAN INSTITUTE OF TECHNOLOGY BOMBAY



NATIONAL PROGRAMME ON DIFFERENTIAL EQUATIONS THEORY, COMPUTATION & APPLICATIONS NPDE-TCA

(Sponsored by DST)

3rd Indo-German Workshop on Adaptive Finite Element Methods (WAFEM-2013)

Venue: INSTITUTE OF MATHEMATICS & APPLICATIONS, BHUBANESWAR February 22nd - March 2nd, 2013

Institute of Mathematics & Applications (IMA), Bhubaneswar will be hosting the third Indo-German Workshop on 'Adaptive Finite Element Methods' during 22nd February – 2nd March, 2013 under National Program on Differential Equations: Theory, Computation & Applications (NPDE-TCA).

OBJECTIVES:

- To expose young researchers particularly from India to efficient and reliable algorithms related to adaptivity, feed-back and a posteriori error control.
- To bring together and to provide a common platform for exchanging ideas and results pertaining to the challenges in these front line areas of FEM.
- To expose the participants to hands-on-computing through Computational Lab Sessions.

TARGET AUDIENCE:

Research Scholars and Researchers working on Computational PDE in various Indian Universities, Institutes and Research & Development Organizations.

MAIN TOPICS:

Overview of Sobolev Spaces and weak solutions to elliptic PDEs, Mathematical Foundation of Finite Element Methods, Adaptive Finite Element Methods, a posteriori error analysis and convergence of adaptive methods with hands-on-computation.

RESOURCE PERSONS:

Ph. Brinkmann (Humboldt University, Berlin), C. Carstensen (Humboldt University, Berlin), P. Dhanumjaya (BITS, Goa), D. Gallistl (Humboldt University, Berlin), Thirupathi Gudi (IISc, Bangalore), Amiya K. Pani (IITB), Rajen K. Sinha (IIT Guwahati), B.V. Rathish Kumar (IITK), M. Schedensack (Humboldt University, Berlin), Madhurmita Tripathy (IMA, Bhubaneswar), A.S. Vasudevamurthy (TIFR CAM, Bangalore).

CO-ORDINATORS:

Sudarshan Padhy (IMA, Bhubaneswar), C. Carstensen (Humboldt University, Berlin) and Amiya K. Pani (IITB).

PARTICIPATION:

To participate in the workshop, fill in the required form which can be downloaded from the website: http://www.math.iitb.ac.in/~npde-tca and email to: npde.2012@gmail.com or by post to the following contact address. Preference will be given to candidates who are earlier exposed to Sobolev spaces, weak solutions to elliptic PDEs etc., and MATLAB.

CONTACT:

Co-ordinators, Advanced Workshop (AWAFEM-2013), Department of Mathematics, IIT Bombay, Powai, Mumbai 400076, Email: npde.2012@gmail.com, Phone: 022-25764765.

Registration Fees:

Rs. 2000/- for per participant. Demand draft of an amount Rs. 2000/- should be made in the name of Director, IMA Bhubaneswar.

Last date of receipt of application: January 15th, 2013.

Selection of participants will be based of their academic records and recommendation letters.

List of selected participants will be put on the web page by **January 17th, 2013.**