



## INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

### NATIONAL PROGRAMME ON DIFFERENTIAL EQUATIONS THEORY, COMPUTATION & APPLICATIONS

NPDE-TCA  
(Sponsored by DST)

#### Workshop on Recent Developments on Numerical Methods for Evolution Equations (RDNMEE-2013)

(Dedicated to Prof. P. L. Bhatnagar on his birth centenary)

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY  
March 18<sup>th</sup> – 21<sup>st</sup>, 2013

Indian Institute of Technology Bombay will be hosting a Workshop on Recent Development on Numerical Methods for Evolution Equations during March 18<sup>th</sup> - 21<sup>st</sup>, 2013 under National Programme on Differential Equations: Theory, Computation & Applications (NPDE-TCA).

#### OBJECTIVES:

The main objective of this program is to give a flavor of the advanced topics, current trends and future directions in the area of numerical methods to evolution partial differential equations (PDEs) and deliver some state of the art lectures on the topic by experts.

We also would like this program to be an initiative to bring together the researchers working in this field.

#### TARGET AUDIENCE :

M.Sc (Mathematics) final year, M.Tech (Aerospace, Mechanical) final year, Ph.D (Mathematics, Aerospace, Mechanical).

#### MAIN TOPICS :

Multi-dimensional methods for hyperbolic balance laws, Fluid-structure interaction problems, BGK model and kinetic schemes, Multi-scale problems in compressible flows, Grid free schemes for incompressible flows, Non-linear diffusion filtering.

#### RESOURCE PERSONS:

Prof. K. R. Arun (IISER, Thiruvananthapuram), Prof. Maria Lukacova (Johannes Gutenberg University), Prof. Phoolan Prasad (IISc, Bangalore), Prof. M. K. Kadalbajoo (IIT, Kanpur), Prof. S. Sunder (IIT, Madras), Prof. Yedida V. S. S. Sanyasiraju (IIT, Madras).

#### ORGANIZING COMMITTEE :

Prof. Phoolan Prasad (IISc, Bangalore), Prof. S. Baskar (IIT, Bombay), Prof. A. K. Pani (IIT, Bombay).

#### CO-ORDINATORS :

Prof. S. Baskar (IIT, Bombay), Prof. A. K. Pani (IIT Bombay).

#### 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](mailto:npde.2012@gmail.com) or by post to the following contact address.

#### CONTACT :

Co-ordinators, Workshop on (RDNMEE-2013), Department of Mathematics, IIT Bombay, Powai, Mumbai – 400076,  
Email :- [baskar@math.iitb.ac.in](mailto:baskar@math.iitb.ac.in), Phone : 0222576 7463

*Last date of receipt of application: 24<sup>th</sup> January, 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 26<sup>th</sup> January 2013*