#### INDIAN INSTITUTE OF TECHNOLOGY BOMBAY



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



(Sponsored by DST)

Advanced Workshop on "Partial Differential Equations: Analysis and Applications" (PDEAA-2013)

### Venue:

DST-CIMS and DEPARTMENT OF MATHEMATICS, BANARAS HINDU UNIVERSITY, VARANASI. July 20 -30, 2013

Banaras Hindu University, Varanasi will be hosting an Advanced Workshop on "Partial Differential Equations: Analysis and Applications" during July 20<sup>th</sup> - 30<sup>th</sup> , 2013 under National Program on Differential Equations: Theory, Computation & Applications (NPDE-TCA).

# AIM:

The aim of this workshop is to provide an insight of the theoretical concept of the methods used to solve the PDEs and its application to different fields of science and engineering to the participants. To provide basic underpinning knowledge of PDEs. The main attention will be paid on the methods of finding analytical as well as numerical solutions of elliptic and parabolic PDEs.

#### **TARGET AUDIENCE:**

Researchers working in the area of mathematical modeling and partial differential equations.

#### MAIN TOPICS:

Transport Equation, Classical Solutions of Elliptic Equation, Parabolic Equation, Stability Analysis of Parabolic Equation, Numerical Methods for Parabolic PDEs, Solutions of PDEs using Matlab, Applications of Parabolic PDEs.

## **RESOURCE PERSONS:**

V. Raghavendra (IIT Kanpur); Amiya K. Pani (IIT Mumbai); M Vanninathan (TIFR Bangalore); Adimurthi (TIFR Bangalore); B.V. Ratish Kumar (IIT Kanpur); S. Sunder (IIT Chennai); Peeyush Chandra (IIT Kanpur); Praveer Datta (IIT Kanpur).

## **CO-ORDINATORS:**

Arvind Kumar Misra (BHU) and Amiya K. Pani (IITB).

## **PARTICIPATION:**

To participate in the workshop, fill in the required form which can be downloaded from the website: <a href="http://www.math.iitb.ac.in/~npde-tca">http://www.math.iitb.ac.in/~npde-tca</a> and email to: <a href="mailto:npde.2012@gmail.com">npde.2012@gmail.com</a> or by post to the following contact address.

## **CONTACT:**

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

Last date of receipt of application:

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