



# WORKSHOP ON NUMERICAL TECHNIQUES FOR PARTIAL DIFFERENTIAL EQUATIONS

( JULY 10-14 , 2017 ) @ Department of Mathematics, VNIT Nagpur.  
(Sponsored by NBHM-DAE and SERB-DST)

A workshop is being planned to be organized at VNIT Nagpur, Department of Mathematics during July 10-14, 2017. The aim of this workshop is to systematically expose the students of applied mathematics, physics and engineering to solution of partial differential equations numerically. The topics will be discussed in detail and there will be hands on practice using MATLAB. The target audience for this workshop is expected to consist of senior under graduate students, graduate students, research scholars and faculties in science and engineering.

## WORKSHOP OVERVIEW

The following are the some of the topics which are mainly discussed:

Finite difference methods for general partial differential equations, Finite volume/difference and mesh free methods for non-linear partial differential equations, Finite element method for elliptic equations.

MATLAB/C/Fortran implementation of the algorithms.

## FACULTY/RESOURCE PERSONS AND PROGRAM:

It is envisaged that the program will consist lectures of 1 to 1.5 hour duration in each of the above mentioned topics by eminent academicians from reputed institutions. The following is the tentative list of faculty/ resource persons for the workshop:

- ✦ Prof. G. D. Veerappa Gowda , TIFR-CAM (Numerical analysis of PDE, Conservation laws)
- ✦ Prof. A. S. Vasudeva Murthy, TIFR-CAM (Numerical analysis of PDE of evaluation type, Mathematical modelling of atmospheric phenomenon)
- ✦ Dr. N. Kishore Kumar, BITS-Pilani, Hyderabad (Numerical solutions of elliptic PDE: Spectral element methods, Finite element methods; Numerical linear algebra: Tensor decompositions)
- ✦ Dr. N. Anil, BITS-Pilani, Hyderabad (Discrete Adjoint Approaches for steady and unsteady flows, Mesh free methods, Aerodynamics shape optimization, High performance computing)

## ORGANIZING COMMITTEE

Dr. G. Naga Raju,  
Dr. V. V. Awasthi,  
Dr. Sathish Kumar A,  
Department of Mathematics, VNIT Nagpur.

## FINANCIAL SUPPORT FOR THE WORKSHOP

NBHM-DAE and SERB-DST are the sponsors for conducting this workshop.

## Important Dates

- Workshop Dates: 10-14 July, 2017
- Registration Deadline: 25 June, 2017

## Accommodation & local hospitality

Accommodation will be provided only for the out station participants only. Breakfast, lunch and dinner will be provided during workshop period.

**TA/DA will not be provided.**

## APPLICATION PROCEDURE

The applicants should send a soft copy of the completely filled registration form to the email id [me.raju@gmail.com](mailto:me.raju@gmail.com) on or before **25/06/2017**. The registration form for the workshop is in the next page of this information brochure and the same can be downloadable from [www.vnit.ac.in](http://www.vnit.ac.in).

Please note that the number of participants aimed for the workshop is limited. Only selected candidates will be informed through email from the organizers, the list will also be displayed on the website.

## Dr. G. Naga Raju

Convener,  
Workshop on Numerical Techniques for Partial Differential Equations (NTPDE-17),  
MH-1/14, Department of Mathematics,  
South Ambazari Road, V.N.I.T.,  
Nagpur- 440010, Maharashtra.  
Phone: 0712-280-1257(off.), 9960759593(Mob.)  
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# Visvesvaraya National Institute of Technology, Nagpur

## Department of Mathematics

### Registration Form

Five-day workshop

On

## "Numerical Techniques for Partial Differential Equations"

Organized by Department of Mathematics, VNIT, Nagpur.

Dates: July 10-14, 2017

Sponsored by NBHM-DAE and SERB-DST

Please Tick: Faculty  UG Student  PG Student  Research Scholar

1. Name: \_\_\_\_\_  
In Block Letters (First Name) (Middle Name) (Last Name)

2. Address: \_\_\_\_\_  
\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Pin Code: \_\_\_\_\_

3. Email id: \_\_\_\_\_ Mobile No.: \_\_\_\_\_

4. References : i) Name: \_\_\_\_\_ Address: \_\_\_\_\_

Phone no. \_\_\_\_\_ email id. \_\_\_\_\_

ii) Name: \_\_\_\_\_ Address: \_\_\_\_\_

Phone no. \_\_\_\_\_ email id. \_\_\_\_\_

### 5. Academic Details (from undergraduate onwards):

Degree and Specialisation	University/Institute	Year of Completion	Marks & Division	Rank

Date: \_\_\_\_\_

Signature of Applicant: \_\_\_\_\_

- ❖ The filled registration form in the prescribed format has to reach the workshop convener at [me.raju@gmail.com](mailto:me.raju@gmail.com) on or before **June 25, 2017**.
- ❖ Late registration and incomplete form will not be entertained.
- ❖ Only selected candidates will be informed through email from the organizers, the list will also be displayed on the website.

Dr. G. Naga Raju,  
Convener, NTPDE-2017

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