

# **National Centre for Mathematics**

www.ncmath.org
(A joint centre of TIFR and IIT Bombay)

## **Advanced Training in Mathematics Schools**

www.atmsschool.org

(Supported by National Board for Higher Mathematics)

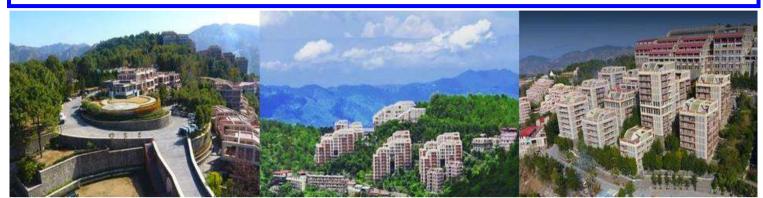




# NCM - Advanced topics in PDEs (2023)

Venue: Jaypee University of Information Technology, Waknaghat, Shimla Hills,

Distt - Solan, Himachal Pradesh. Date: 15<sup>th</sup> to 27<sup>th</sup> May 2023



This NCMW aims to introduce the participants to the advanced topics in Partial Differential Equations (PDEs). This will be indeed immensely helpful to the researchers who are already familiar with the basics of PDEs, since we are going to discuss several state-of-the art techniques related to Hyperbolic, Elliptic and Parabolic PDEs. We plan to discuss topics like BV compactness for scalar conservation laws, controllability of PDEs with their applications, Homogenization of elliptic PDEs, Compensated compactness method for scalar conservation laws, Caffarelli-Silvestre extension problems for fractional PDEs, and concentration compactness principle and their applications in the Sobolev embedding. This workshop is intended for Ph.D. students in the Universities and Research Institutions.



Dr. Ujjwal Koley
Tata Institute of Fundamental Research
(TIFR-CAM) Bengaluru - 560065
E-mail: ujjwal@math.tifrbng.res.in

## **Organizers**



Dr. Rakesh Kumar Bajaj Professor & HoD (Maths), Jaypee University of Information Technology, Waknaghat, Solan, H.P - 173234

E-mail: rakesh.bajaj@juitsolan.in



Dr. Bidhan Chandra Sardar, Department of Mathematics IIT Ropar, Punjab - 140001 E-mail: bcsardar@iitrpr.ac.in

#### Workshop Co-ordinators



Dr R S Raja Durai (JUIT, Waknaghat)



Dr P K Pandey (JUIT, Waknaghat)



**Dr Ujjwal Koley** (TIFR-CAM, Bangalore)



Dr. Ali Hyder (TIFR-CAM, Bangalore)

## Resource Persons



Dr. Debayan Maity (TIFR-CAM, Bangalore)



Dr. Arka Mallick (IISc, Bangalore)



Dr. Rajib Dutta (IISER, Kolkata)



Dr. Bidhan C Sardar (IIT, Ropar)

# **General Information**

Last date for receiving online applications: 15<sup>th</sup> April 2023

Number of Participants: 40

The list of selected participants will be put up in website after one week of last date of submission.

## **For More Details**

Visit workshop webpage https://www.atmschools.org/school/2023/NCMW/atpdes