

**ONLINE e-SHORT-TERM  
COURSE  
ON**

**Recent Development in Numerical  
Methods for Partial differential  
Equations**

**(RD-NMPDE-2022)**

**(30<sup>th</sup> May 2022-03<sup>rd</sup> June 2022)**



**ORGANIZED BY**

**Department of Mathematics &  
Scientific Computing  
National Institute of  
Technology Hamirpur  
Himachal Pradesh-India**



**ABOUT NIT HAMIRPUR**

National Institute of Technology Hamirpur is one of the thirty-one NITs of the country, which came into existence on 7th August 1986 as Regional Engineering College, a joint and cooperative enterprise of the Govt. of India and Govt. of Himachal Pradesh. On 26th June 2002, REC Hamirpur was awarded the status of Deemed University and upgraded to National Institute of Technology. NIT Hamirpur is an institute of National importance set up by an act of Parliament namely the National Institute of Technology Act 2007 which received the accent of the President of India on 5th June, 2007.

**ABOUT DEPARTMENT OF MATHEMATICS  
AND SCIENTIFIC COMPUTING**

The department of Mathematics & Scientific Computing came into existence in August-2009. Previously, this department was a part of department of Applied Sciences & Humanities, which came into existence in 1986. The department is supported by potential and devoted faculty members. The Department has a vibrant research atmosphere backed up by good infrastructural facilities. We have a mathematical computational laboratory consisting of computing machines and Software's. This department has been contributing a lot for the overall development of the institution since its inception.

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<b>RESOURCE PERSONS</b>	<b>ABOUT THE STC</b>	<b>HOW TO APPLY</b>
<p>Prof. Ch. Srinivasa Rao, IIT Madras  Dr. Mani Mehra, IIT Delhi  Prof. L.P. Singh, IIT BHU  Prof. R.K. Mohanty, SAU Delhi  Dr. Harish Kumar, IIT Delhi  Dr. Jagdish Chand Bansal, SAU Delhi  Dr. Subhashree Mohapatra, IIIT Delhi  Dr. Muslim Malik, IIT Mandi  Prof. P.P. Chakravathy, VNIT Nagpur  Prof. V. Ambethkar, University of Delhi  Dr. N. Gnanasekaran, NIT Karnataka</p> <p><b>REGISTRATION FEE</b></p> <p>Through SBI Collect</p> <ul style="list-style-type: none"> <li>❖ Student (UG/PG/PhD): Rs. 200/-</li> <li>❖ Academia/ R&amp;D Labs: Rs. 500/-</li> <li>❖ Industry participants: Rs. 1000/-</li> </ul> <p><b>IMPORTANT DATES</b></p> <ul style="list-style-type: none"> <li>➤ Last Date of Registration: 22/05/2022</li> <li>➤ Confirmation to Participants : 24/05/2022</li> </ul> <p><b>WHO CAN APPLY</b></p> <p>This program is open to faculty members, scientists, research scholars, PG &amp; UG Students and industrial personnel.</p>	<p>Many challenging problems from physical and data sciences (e.g. control theory, molecular dynamics, quantum mechanics) are modeled by PDEs, either of high dimensional functions or with high dimensional parameter fields. Closed form solutions for PDE equations are only attainable in very few circumstances and on very restricted domains, hence a substantial portion of numerical analysis research is devoted to computing approximation solutions. Several mesh based methods e.g. Finite difference method (FDM), Finite element method (FEM), Finite volume method (FVM) etc. are developed in literature for computing approximate solutions. Recently deep learning algorithms also interacts researchers to solve high dimensional complex PDEs. The proposed short term course seeks to update the knowledge of recent trends in numerical methods for PDEs by means of providing participants with introduction to the basic and advanced associated concepts.</p> <p><b>OBJECTIVES OF THE STC</b></p> <ul style="list-style-type: none"> <li>❖ To provide young researchers the theory of differential equations and their applications in real world problems.</li> <li>❖ To encourage the researchers to enhance their ability for problem solving in high dimensional PDEs.</li> <li>❖ To provide recent developments, analysis and interpretation of numerical methods for PDEs.</li> </ul> <p><b>E-CERTIFICATION</b></p> <p>E-certificates will be provided to the participants, with at least 80% attendance, upon successful completion of the program.</p>	<p>The interested candidates must deposit the registration fee through SBI collect with the following procedure</p> <ul style="list-style-type: none"> <li>➤ Go to SBI collect and choose Himachal Pradesh as state of Institution and type of Institution as educational institute.</li> <li>➤ Choose NIT Hamirpur from Name of the Institutions and Select payment category as WORKSHOP FDP STC CONFERENCE.</li> </ul> <p><a href="https://www.onlinesbi.com/sbicollect/icollecthome.htm">https://www.onlinesbi.com/sbicollect/icollecthome.htm</a></p> <ul style="list-style-type: none"> <li>➤ Generate the payment slip and attach it with the registration form available at the Registration Link.</li> </ul> <p><a href="https://forms.gle/UeCYUbSnDB7Ddh3P7">https://forms.gle/UeCYUbSnDB7Ddh3P7</a></p> <p>Notes: *Applications will be accepted on first come-first serve basis.  *Venue: Through Google Meet. The link for the online course will be shared through email later.</p> <p><b>CONTACT PERSON</b></p> <p>Dr. Neha Yadav  Department of Mathematics &amp; Scientific Computing, NIT Hamirpur (H.P.) India  Email: <a href="mailto:nyadav@nith.ac.in">nyadav@nith.ac.in</a>,  Phone No. : +91-7310751691</p> <p>Dr. Subit Jain  Department of Mathematics &amp; Scientific Computing, NIT Hamirpur (H.P.) India  Email: <a href="mailto:jain.subit@nith.ac.in">jain.subit@nith.ac.in</a>  Phone No. : +91-9218226102</p>