

An International Conference  
on

# Emerging Frontiers in Mathematical and Computational Sciences

(EFMCS - 2024)



Springer

**DEPARTMENT OF MATHEMATICS  
NORTH - EASTERN HILL UNIVERSITY  
SHILLONG, MEGHALAYA, INDIA**

# North- Eastern Hill University (NEHU)

The North-Eastern Hill University (NEHU) was established in 1973 to disseminate and advance knowledge in the hilly areas of North Eastern Region of India. It has a special mandate to improve the socio - economic conditions and welfare of the people in these areas, particularly emphasizing their intellectual, academic, and cultural advancement. In the past 50 years, the University has rendered yeoman's service to these areas in fulfilling this mandate.



# Department of Mathematics, NEHU, Shillong

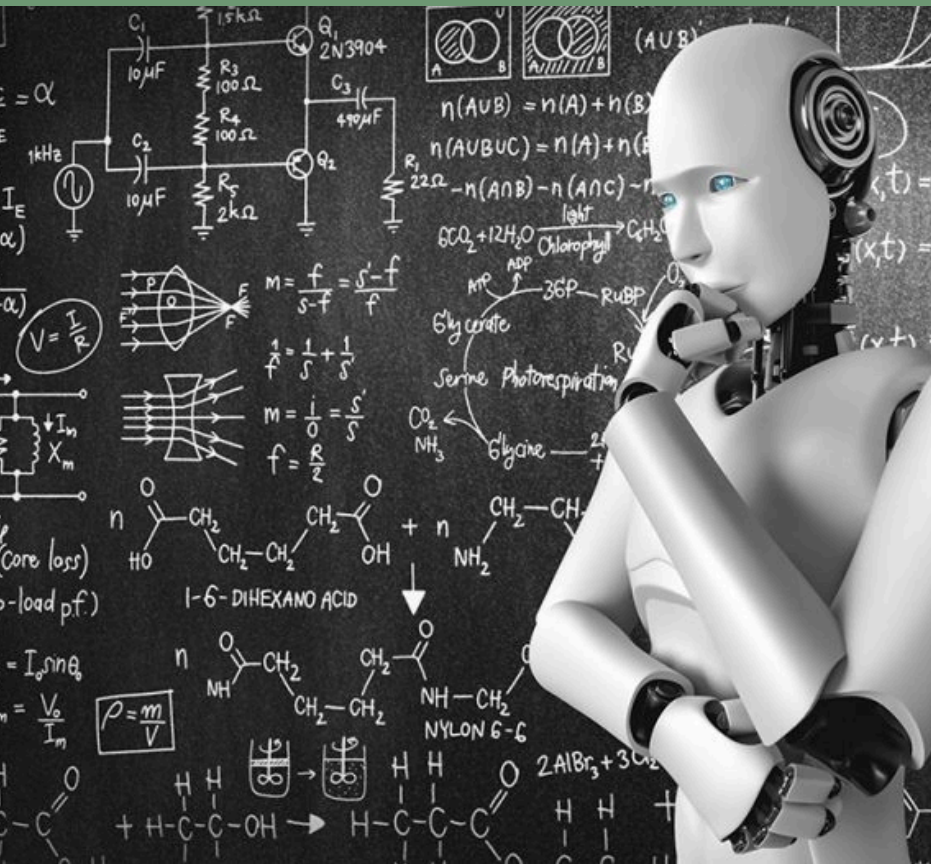


The Department of Mathematics was established in the year 1974. From that time onwards, the department has been striving to provide quality and rigorous M.Sc., M.Phil., and Ph.D. courses in the fundamentals of the core area of mathematics like Algebra, Analysis, Differential Equations, Numerical Analysis, Topology, Geometry and Number Theory along with their applications such as Relative Theory, Cosmology, Computational Fluid Dynamics and many more. It has always followed the culture of all good universities of the world and pursued fundamental research of an original nature rather than repetitive and marginal research.



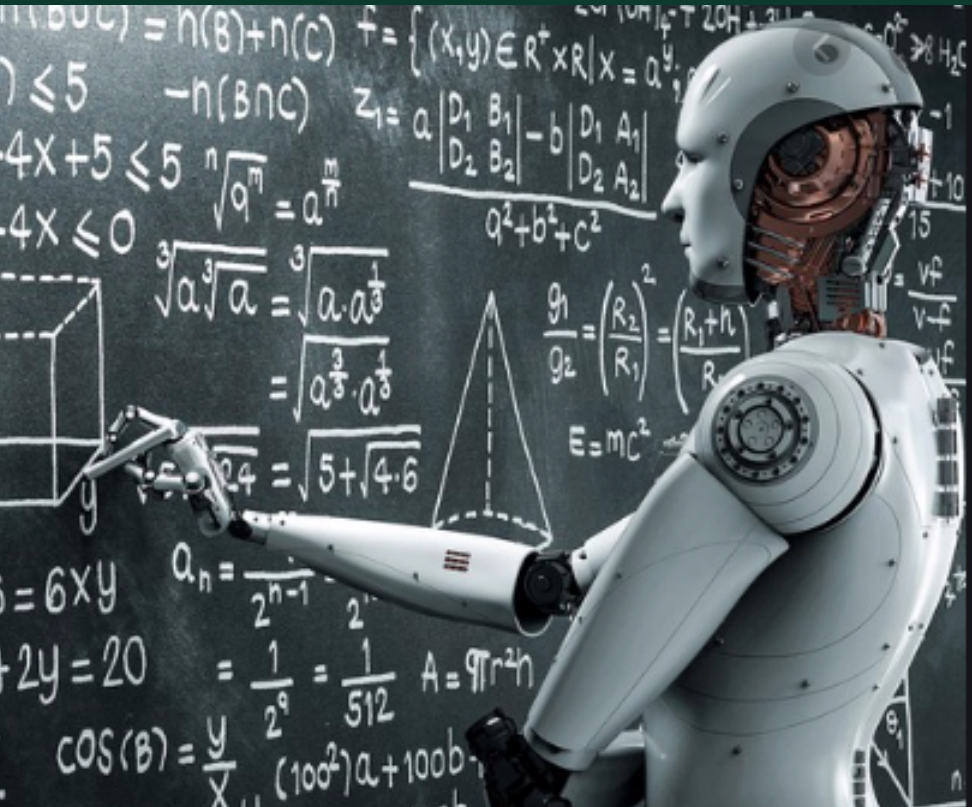
# Objective

The main objective of this conference is to promote mathematical research and to focus on the recent advances in Higher Mathematics, Engineering Mathematics, Mathematical Sciences, Mathematical Modelling, Environmental Modelling, Nano-Science, and Technology, etc. The conference aims to provide an ideal platform for young researchers to interact with senior scientists, exchange their views and ideas, and initiate possible scientific collaboration in different domains. The program will include the participation of renowned keynote speakers, oral presentations, poster sessions related to the topics dealt with in the Scientific Program, and social events.



# Conference learning outcomes

- Create a positive academic and research environment during this period after the global pandemic.
- Interaction with mathematicians from other institutes, universities, and colleges.
- Students will be encouraged to participate in research orientation by being provided with a platform for disseminating their research outputs.
- Students would get exposure to the various application areas of mathematics.
- The interdisciplinary nature of mathematical sciences would be understandable to the students in a stronger way.



# Advisory Board Members

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# Organizing Committee



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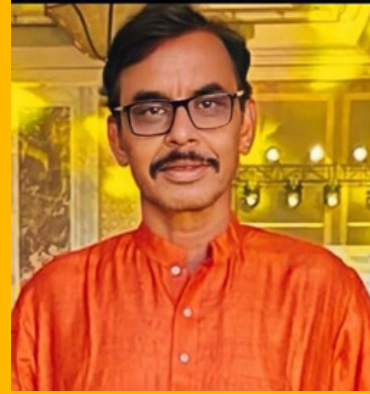
# Our 2024 Speakers



**Prof. Precious Sibanda**  
University of KwaZulu- Natal,  
South Africa



**Prof. Sagnik Dey**  
Indian Institute of  
Technology Delhi, India



**Prof. Prashanta Kumar Mandal**  
Visva-Bharati Santiniketan,  
India



**Prof. Om Prakash**  
Indian Institute of  
Technology Patna, India



**Prof. Surajit Chattopadhyay**  
Amity University Kolkata,  
India



**Prof. Banktेशwar Tiwari**  
Banaras Hindu University,  
Varanasi, UP, India



**Prof. Satyajit Roy**  
Indian Institute of  
Technology Madras, India



**Prof. Sukumar Das Adhikari**  
Ramakrishna Mission  
Vivekananda Educational  
and Research Institute,  
India



**Prof. Ram Prakash Sharma**  
National Institute of  
Technology Arunachal  
Pradesh, India



**Prof. Vinay Wagh** Indian  
Institute of Technology  
Guwahati, India



# Topic related to the theme of the conference, but are not limited to:

## Theme Area 1: Mathematical Modeling and Simulation

**Topics:** Fluid dynamics  
Numerical Analysis  
Mathematical Physics  
Environmental Modeling  
Mathematical Biology  
Mathematical Chemistry  
Differential Equations  
Complex Modeling

## Theme Area 4: Data science and its real-world applications

**Topics:** Applied Statistics  
Operations Research  
Big- Data Analytics

## Theme Area 2: Applications of Engineering Mathematics

**Topics:** Nano Science and Nanotechnology  
Computational Engineering  
Scientific Computing  
Computational Mechanics  
Dynamical system  
Dynamics

## Theme Area 5: Mathematics in Astrophysics and Earth System Science

**Topics:** Relativity and Cosmology, etc

## Theme Area 3: Applications of Pure Mathematics

**Topics:** Discrete Mathematics  
Algebras  
Fuzzy Sets and Logic  
Number theory and cryptography  
Special Functions  
Topology  
Functional Analysis  
Fixed Point Theory  
Graph Theory  
Geometry



# Call for Papers:

Authors are invited to submit the full-length abstract in the prescribed MS Word format (given below) on an A-4 size page on or before the last date to **to the given link below (File name: Abstract\_Your name)**. The contributed abstract must be original and should not have been accepted/ published in any journals/proceedings. Upon the notification of acceptance, the author will have to submit the final copy of the full-length abstract and registration fee through the registration link on or before the last date.

**LINK OF ABSTRACT &  
COPYRIGHT FORMAT:**

<https://forms.gle/oefXiHwFp9gd9jpuF9>

**ABSTRACT  
SUBMISSION LINK:**

<https://forms.gle/G2jeQ1Jy8xYJNcio7>

# Publications:

After the peer review process, some selected full-length manuscripts (**presented at the conference**) will be submitted to the reputed publishers for publication in WOS/ Scopus/ UGC-CARE-indexed journals and a proposal is already submitted to **Springer** for possible publication (without publication fee). The further review process would be as per the review process of the publishers/ journals.



# Registration Fee

Participants	Indian Delegates		Foreign Delegates	
	Early-bird	Late	Early-bird	Late
Students/ Research Scholar/ PDF	INR 1500	INR 2000	USD 100	USD 150
Faculty Member	INR 2500	INR 3000	USD 150	USD 200
Industry and R&D Persons	INR 3000	INR 3500	USD 200	USD 250
Additional Paper/ Author/ Attendee	INR 1500	INR 2000	USD 100	USD 150

Registration fee includes conference kit and fooding.  
(Note that the registration fee does not include accommodation.)

## PAYMENT DETAILS (DIRECT DEPOSIT IN BANK ACCOUNT)

Account Number: 054101000090003

Account Holder Name: FO NEHU

Bank Name: INDIAN OVERSEAS BANK

IFSC Code : IOBA0000541

Branch Name: Morellong Building, Shillong

Branch Address: Shillong - 793001

# Important Dates

Submission of abstract	1st July 2024
Acceptance of abstract	30th July 2024
Early-bird Registration	30th August 2024
Late Registration	30th September 2024
Submission of full length article	30th September 2024

## Accommodation and Travel

A limited number of accommodations for the participants will be arranged on a payment basis in the University Guest House on prior request. No travel support will be provided to the participants

(\*Registration fee does not includes accommodation and travel support)



# Reach Out



+919932020872/ +918414033829



mathconference2024.nehu@gmail.com



<https://www.nehu.ac.in/event>



Department of Mathematics, North–Eastern Hill University, Shillong – 793002, Meghalaya, India



**REGISTRATION LINK:**

<https://forms.gle/oefXiHwFpgd9jpuF9>





# MEGHALAYA



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