

20-22 JULY  
2023



# NATIONAL CONFERENCE ON

## Recent Trends in Mathematical Biology Theory, Methods & Applications

Partially supported by DST SERB, India

Venue: Prasanthi Nilayam Campus, SSSIHL

**DMACS**

Department of Mathematics &  
Computer Science



**SSSIHL**

Sri Sathya Sai Institute of  
Higher Learning

## ABOUT THE CONFERENCE

The main focus of this **Hybrid Mode** conference is to provide a stage for sharing of knowledge regarding the recent developments of **Mathematical Models in Biological systems, tools, and techniques used for the qualitative behavior of the systems.**

This conference will provide a vibrant platform to bring together scientists, researchers, educators, and PG students across academia and organization and, exchange valuable ideas and impart guidelines on technical research & across the country to cover all aspects of **Biomathematics** from a **Multi-disiplinary perspective.**

This conference will be streamed online via **SSSIHL** official Youtube channel.

## CONFERENCE TOPICS

**MATHEMATICAL BIOLOGY  
MATHEMATICAL MODELING  
ECOLOGY AND EPIDEMIOLOGY  
COMPUTATIONAL MODELING  
PARAMETER ESTIMATION  
PREDICTIVE ANALYTICS  
UNCERTAINTY**

## ELIGIBILITY

We invite **Faculty, Scholars and industrial practitioners** working in **Mathematical Biology, epidemic and ecological modeling** as well as **Postgraduate students** who wish to **puruse research in Mathematical Modeling.**

## REGISTRATION

To apply to register for the event, kindly fill in the application form by **July 13th, 2023**

**Registration and accommodation (on a twin sharing basis ) during the event are Free of Cost. Lunch and snacks are complimentary.**



## CALL FOR PAPERS

Original and unpublished papers are invited. Interested participants can present their work orally in the broad areas of scientific themes related to the topics of the conference. The abstract of the paper (and all enquiries) must be submitted via email to [events.dmacs@sssihl.edu.in](mailto:events.dmacs@sssihl.edu.in)

Papers selected after due peer review process will be published in a special issue in **Computational and Mathematical Biophysics journal (CMB)**. CMB is indexed in SCOPUS and MathScinet.

## BEST RESEARCH PAPER & POSTER AWARDS

Best Research Paper and Research Poster Competition will be held during the conference.

Research Poster Specifications: Height 122 cms and width 92 cms

Please send Abstracts for both papers and posters to [events.dmacs@sssihl.edu.in](mailto:events.dmacs@sssihl.edu.in) by July 10th, 2023.

Contact Details: [events.dmacs@sssihl.edu.in](mailto:events.dmacs@sssihl.edu.in)

Phone No: **7901286254**

## KEYNOTE SPEAKERS

Prof. Peeyush Chandra, IIT Kanpur  
Prof. B.V. Rathish Kumar, IIT Kanpur  
Prof. Joydip Dhar, ABV, IITM Gwalior  
Prof. Ranjit kumar Updhyay, IIT(ISM)  
Dhanbad  
Prof. Sandip Banerjee, IIT Roorke  
Dr. Dharmendra Tripathi, NIT  
Uttarakhand  
Dr. Bapan Ghosh, IIT Indore  
Dr. Nitu Kumari, IIT Mandi

Dr. Jai Prakash Tripathi, Central  
University of Rajasthan  
Dr. Prashant K Srivastava, IIT Patna  
Dr. P Muthu, NIT Warangal  
Dr. Mohit kumar Jolly, IISC  
Bangalore  
Dr. Ritesh kumar Dubey, SRMIST  
Chennai  
Dr. S R V Prasad Bhuvanagiri, VIT  
Vellore



## ABOUT CNMB

During one of the sessions of the conference, we propose to discuss about a Consortium and Network for Mathematical Biology (CNMB) with applications to Health, Environment and Agriculture. The aim of this consortium is to have a collaborative interdisciplinary culture between the communities consisting of Mathematicians - interested in modeling, AI, Data Science etc., Biostatisticians, Life Scientists, Medical Scientists, Epidemiologists, Ecologists and others for fruitful Dialogue.

## ABOUT DMACS

The composition of the teaching faculty of the Department of Mathematics & Computer Science (DMACS) provides a mix of expertise in Mathematics and Computer Science. Given this unique position, DMACS is committed to fully exploit its potential and venture into inter disciplinary research. The Department offers excellent facilities for research and projects in theoretical as well as technological areas.

The active areas of research in Mathematics are Ecological and Epidemic Modelling, Microlocal analysis, Dynamical systems, Differential Equations-Existence and Qualitative study and Interface Problems. High Performance Computing, Image processing and Computer Vision, Machine learning and Deep learning, datamining and Cryptography are major thrust areas in Computer Science. The faculty keeps abreast of the latest developments in their fields by access they have to the leading journals in their respective areas and also by way of collaborating with academia and industry, both in India and abroad. The development has impressive list of adjunct faculty from India and abroad who regularly visit the SSSIHL, adding strength and insight to the academic and research programs. The department has signed several MoUs with IT industries to develop solutions/products of social relevance.

<https://www.sssi.hl.edu.in/departments/mathematics-computer-science/>

## ABOUT SSSIHL

The Sri Sathya Sai Institute of Higher Learning (SSSIHL) (Deemed-to-be-University), Prasanthi Nilayam, Andhra Pradesh, India, is one of the few institutions in the world offering values-based education to students at the University level. Ethics and morals form the undercurrent of every subject taught at the Deemed to be University, providing a holistic framework of inter-personal development for its students combined with academic excellence. The Deemed-to-be university hosts students from across the country at its four campuses in Andhra Pradesh and Karnataka, India and provides free education to all programmes of study. The programmes offered include undergraduate, postgraduate, professional and research. It has a merit-based open admissions policy for all, irrespective of income, religion or social status. SSSIHL also provides a strong research environment, with exceptional academic practices, that has resulted in the growth of national and international collaborations. The Central Research Instruments Facility (CRIF), based at the Prasanthi Nilayam Campus of the SSSIHL, is one of the few facilities in the country that houses advanced Characterisation / Analytical Tools to carry out Translational Research in various areas of Science and Technology.

For further information, visit: <https://www.sssi.hl.edu.in/about-us/>



## **CHIEF PATRONS**

**Prof. B Raghavendra Prasad, Vice-Chancellor, SSSIHL**

**Prof. B Sai Giridhar, Registrar, SSSIHL**

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