20-22 JULY **2023** 

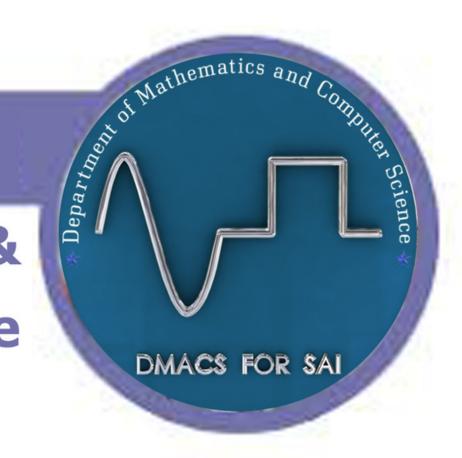
# NATIONAL CONFERENCE ON

Recent Trends in Mathematical Biology
Theory, Methods & Applications

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 In-Person 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-displinary perspective.

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

https://www.youtube.com/srisathyasaiinstituteofhigherlearning

# **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

https://forms.gle/5YuFSSa2X78SqLQn6

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Original and unpublished papers are invited.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

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@sssihkedu.in by July 10th, 2023.

Contact Details: 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

# **CHIEF PATRONS**

Prof. B Raghavendra Prasad, Vice-Chancellor, SSSIHL
Prof. B Sai Giridhar, Registrar, SSSIHL

### **CHAIRPERSON**

Dr. (Ms.) Y Lakshmi Naidu, Head of the Department, DMACS, SSSIHL

# ORGANIZING SECRETARY

Dr. Krishna Kiran Vamsi Dasu, DMACS, PSN CAMPUS, SSSIHL

# SCIENTIFIC ORGANIZING COMMITTEE

Prof. Peeyush Chandra, IIT Kanpur

Prof. B.V. Rathish Kumar, IIT Kanpur

Prof. Joydip Dhar, ABV, IITM Gwalior

**Prof. Sandip Banerjee, IIT Roorke** 

Dr. Bapan Ghosh, IIT Indore

Dr. Nitu Kumari, IIT Mandi

Dr. Jai Prakash Tripathi, Central University of Rajasthan

Dr. Prasanth K Srivastava, IIT Patna

Dr. Ritesh kumar Dubey, SRMIST, Chennai

Dr. S R V Prasad Bhuvanagiri, VIT Vellore

## LOCAL ORGANIZING COMMITTEE

Prof. Pallav Kumar Baruah, Dean of Sciences, SSSIHL

Dr. R Raghunatha Sarma, Director, PSN CAMPUS, SSSIHL

Dr. N Uday Kiran, A. HOD, DMACS, PSN CAMPUS, SSSIHL

Dr. S Balasubramanian, DMACS, PSN CAMPUS, SSSIHL

Dr. Srikanth Khanna, DMACS, PSN CAMPUS, SSSIHL

Dr. B V K Bharadwaj, DMACS, PSN CAMPUS, SSSIHL

Dr. Sai Shyam Sarma, DMACS, PSN CAMPUS, SSSIHL

Dr. M S Srinath, DMACS, PSN CAMPUS, SSSIHL

Mr. C Uday Kiran, DMACS, PSN CAMPUS, SSSIHL

Mr. Varun Vallampatla, DMACS, PSN CAMPUS, SSSIHL

# **ABOUT CNMB**

During one of the sessions of the conference, we propose to discuss about a Consortium and Network for Mathematical Bioloogy (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.sssihl.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.sssihl.edu.in/about-us/