



## Sri Guru Tegh Bahadur Khalsa College

University of Delhi, Delhi – 110007



### INTERNATIONAL CONFERENCE

on

## ‘Mathematical Sciences and its Applications’

### ICMSA 2024

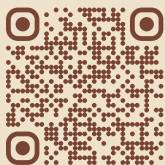
organised by

Department of Mathematics

Sri Guru Tegh Bahadur Khalsa College

University of Delhi, Delhi – 110007

October 15–17, 2024



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**About the College** Sri Guru Tegh Bahadur Khalsa College is a constituent college of University of Delhi. It is a co-educational institution of higher learning established in the year 1951 and is maintained by Delhi Sikh Gurdwara Management Committee (DSGMC) to instill the ideals of self-sacrifice and service among the youth. At the time of its inception, focus of the college was to ensure a comprehensive social transformation through access to quality education, in particular to young Punjabi Refugees of Partition in 1947, and to conserve and promote Punjabi language, culture, and heritage.

Being a centre of excellence in higher education in Humanities, Commerce, and Sciences, promotion of Punjabi Language and Culture is taken as a challenge to attain the objective in the University education of preserving the rich heritage and to fulfil the larger interest of sustaining diversity in a federal democratic country like India.

Our outstanding sports complex, excellent playgrounds, resourceful library, well-equipped laboratories and technologically upgraded computer centre are a matter of pride for the institution. UGC-MALAVIYA MISSION TEACHER TRAINING CENTRE (GAD-MMTTC) (Formerly, Guru Angad Dev Teaching Learning Centre (GAD-TLC)) is one of its kind, established in 2016. Since then, it has been involved in training and professional development of over 80,000 teachers.

**About the Department** The Department of Mathematics is involved in the teaching of various honours and programme courses to undergraduate students. It comprises of 10 dedicated, passionate and hardworking faculty members with specialisations in various fields of Mathematics including Algebra, Analysis, Optimization, Dynamical Systems, and beyond.

Department of Mathematics actively participates in research projects; several students of the Department have done research work on various topics and successfully published their work in reputed journals under the guidance and support of faculty members. From time to time, the Department hosts activities in the interest of students and faculty alike such as workshops, seminars, development & training programmes, and so on.

The Department is also equipped with its academic society and is soon to launch its annual magazine called “MATHOS” which will celebrate the accomplishments of students, as well as feature their literary contributions in the form of articles, poems, etc surrounding various topics in Mathematics.

**About the Conference** Mathematical Sciences encompass a wide range of disciplines such as Pure & Applied Mathematics, Statistics, Actuarial Sciences, Data Science, etc. These disciplines that find their base in mathematics are collectively essential for problem-solving, engineering, technological development, and decision-making in the modern world.

The Department of Mathematics, Sri Guru Tegh Bahadur Khalsa College is hosting an ‘**International Conference on Mathematical Sciences and its Applications**’ which is aimed at providing a dynamic platform for the exchange of ideas across diverse fields in mathematics and related sciences in both aspects; pure as well as applied. To enable the diversity of thought and skill, esteemed subject experts, scholars, and practitioners from around the globe are invited. The conference will feature insightful presentations, interactive sessions, invited and plenary talks, as well as paper presentations in various scientific fields around the theme of the conference.

Mathematics transforms theory into practice, resulting in applications that provide potential solutions to real-world problems. In the spirit of that belief, the Department looks forward to implementing this conference with focus not only on core mathematical concepts but also on the significance of application-based fields such as Computational Mathematics, Biomathematics, Operational Research, and Artificial Intelligence among others. It aims to target advanced areas of study such as Machine Learning, Optimization, Regression Analysis, Risk Theory, and so on.

As a foundational subject, mathematics plays a crucial role in many other fields. This conference aims to foster an interdisciplinary approach, facilitating discussion and inviting original, unpublished research in areas where mathematics is integral. The Department of Mathematics hopes to challenge conventional barriers and encourage exploration in diverse fields, driving innovation and broadening the scope of mathematical applications across various disciplines.

**Topics to be Covered** The topics to be covered will be the following but not limited to:

- Algebra
- Artificial Intelligence
- Biomathematics
- Coding Theory
- Complex Analysis
- Computational Mathematics
- Cryptography
- Data Science
- Differential Equations
- Dynamical Systems
- Financial Mathematics
- Functional Analysis
- Game Theory
- Graph Theory
- Machine Learning
- Mathematical Modelling
- Mechanics
- Number Theory
- Numerical Analysis
- Optimization
- Probability & Statistics
- Topology

## Advisory Committee

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**Prof. Gurmeet Kaur Bakshi**, Panjab University, Punjab  
**Prof. Geetha Venkataraman**, Dr. B. R. Ambedkar Univ., Delhi  
**Prof. Khalil Ahmad**, Al-Falah University, Haryana

## List of Speakers

**Prof. Sat Gupta**, Univ. of North Carolina Greensboro, USA  
**Prof. Yasunori Kimura**, Toho University, Japan  
**Prof. Eberhard Malkowsky**, State Univ. of Novi Pazar, Serbia  
**Prof. Ajay Kumar**, University of Delhi, Delhi  
**Prof. C. S. Lalitha**, University of Delhi, Delhi  
**Prof. Gurmeet Kaur Bakshi**, Panjab University, Punjab  
**Prof. Geetha Venkataraman**, Dr. B. R. Ambedkar Univ., Delhi  
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**Prof. Amit Kumar Bardhan**, University of Delhi, Delhi  
**Prof. Devendra Tayal**, Indira Gandhi Delhi Tech. Univ. (W), Delhi  
**Prof. Kapil Kumar Sharma**, South Asian University, Delhi  
**Prof. Mohammad Abbasi**, Jamia Millia Islamia Univ., Delhi  
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**Dr. Akhlaq Husain**, Jamia Millia Islamia University, Delhi  
**Dr. Hemanta Kalita**, VIT-Bhopal, Madhya Pradesh  
**Dr. Sunil Dutt Purohit**, Rajasthan Tech. Univ., Kota, Rajasthan  
**Dr. Ram Singh**, Baba Ghulam Shah Badshah Univ., J&K

**Target Participants** Academicians, Researchers, Faculty, Post-doctoral Fellows, Industry Professionals, Practitioners, Postgraduate and Undergraduate students from pure and applied areas of Mathematics and associated fields.

**Call for Papers** Original, unpublished papers are invited for presentation in the conference. The selected high-quality papers will be published in Web of Science/SCOPUS/peer-reviewed journals after the conference as per the journal guidelines. Full length article must be submitted to: [icmsa2024@sgtbkhalsa.du.ac.in](mailto:icmsa2024@sgtbkhalsa.du.ac.in).

## Please Note

1. The registration of each author is mandatory for the award of the certificate of presentation.
2. For providing TA/DA to senior scientists and selected young scientists, applications have been submitted to funding agencies including NBHM, SERB, CSIR, etc.
3. A few eminent national and international speakers have generously agreed to deliver an invited talk in online mode. Further, a few selected articles relevant to the theme of the conference might also be considered for presentation in on-line mode.

## Important Dates

**Last date of abstract submission** Sep. 30, 2024

**Last date of registration** Oct. 10, 2024

**Full length article submission** Nov. 20, 2024

## Registration Fees

### For Indian Nationals

UG & PG Students: 500 INR

Research Scholars: 2000 INR

Faculty/Academician: 2500 INR

Industrial Participants: 3500 INR

**For Foreign Nationals** 100 USD

## Account Details

**Acc. Name:** Principal, S.G.T.B. Khalsa College (General Fund)

**Acc. Number:** 08951000004334

**Bank Name:** Punjab & Sind Bank

**Branch Name:** Sri Guru Tegh Bahadur Khalsa College

**IFSC Code:** PSIB0000895

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*Department of Mathematics*

Sri Guru Tegh Bahadur Khalsa College

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## College Address

Sri Guru Tegh Bahadur Khalsa College

University of Delhi

Arts Faculty Road, University Enclave

New Delhi – 110007

College Website: <https://sgtbkhalsadu.ac.in>

**Nearest Metro Station**  Vishwavidyalaya

## Conference Website:

<https://sites.google.com/sgtbkhalsa.du.ac.in/icmsa2024/home>

## For Queries Contact

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