

Dayalbagh Educational Institute (Deemed University), Agra

TIMC (Pune) – DEI (Agra) Joint Five Days National Workshop

on

Advances in Mathematical Sciences and Applications

(19th April 2019 to 23rd April 2019)

Sponsored by

TEQIP-III - TIMC

The field of mathematical sciences is advancing at a rapid rate and has seen development of new analytical approaches and computational tools. Mathematical sciences encompass fields like Pure Mathematics, Applied Mathematics, Mathematical Statistics, Theoretical Computer Science, Engineering Mathematics etc. Advances in mathematical sciences have impacted the field of statistical science, which requires creation of newer tools and approaches to handle complex and richer data sets. Modelling and Simulation, Statistical Learning Theory and Optimization Techniques have become essential tools for modern Engineering Education. For the purpose of illustration, mathematical modelling plays an extremely crucial role in a whole range of engineering and physical sciences such as Algebraic Geometry, Graph Theory, Signal Processing, Artificial Intelligence, Cryptography, Random Matrix Theory, Data Analysis, Adaptive Control, Wireless Communications, Vehicular Traffic, Network Science, Finance etc.

We believe that the students and researchers will benefit from the workshop, which will provide them new insights and give an opportunity to explore new research areas. This workshop **apart from deliberations from various experts** will **also** provide **an opportunity for** interactive sessions to Ph.D. students and young Faculty/Researchers to identify appropriate tools and topics for their research.

LIST OF SPEAKERS AND TENTATIVE TOPICS:

SN	Name	Affiliation	Topic of Talk(s)
1.	Prof. Ravi Kulkarni	Founder President, TIMC Former Director, HRI, Allahabad	1. Philosophy of Mathematics 2. Representation of Finite Groups
2.	Prof. S. A. Katre	Lokmanya Tilak Professor, Pune University, Pune	1. Introduction to Coding Theory 2. Introduction to Ancient Indian Mathematics
3.	Prof. V. P. Saxena	Ex. Vice Chancellor, Jiwaji University, Gwalior.	1. Mathematical Modelling of Biological Populations
4.	Prof. V. D. Pathak	Retired professor Applied Mathematics, MSU Baroda.	1. Fuzzy Optimization 2. Fuzzy Decision Making
5.	Prof. Shalabh Bhatnagar	IISc. Bangalore	1. Stochastic Optimization: Basics 2. Stochastic Optimization: Recent Advances 3. Reinforcement Learning: An Overview
6.	Prof. Subir Das	IIT BHU	1. Applications of None-linear Fractional order Diffusion Equations 2. Study of Some Problems in Fracture Mechanics
7.	Dr. Santosh Kumar	Shiv Nadar University	1. Random Matrix Theory: A Brief Introduction 2. Random Matrix Theory in Multiple Channel communications
8.	Prof. Sudeep Bhattacharya	Shiv Nadar University	1. Fundamentals of Graphs: A Brief Outline 2. Some Ecological Applications of Complex Networks
9.	Prof. C. Patvardhan	Dayalbagh Educational Institute	1. Evolutionary Algorithms for Search and Optimization 2. Towards right amount of randomness in Quantum Inspired Evolutionary Algorithms
10.	Prof. Gur Saran	Dayalbagh Educational Institute	1. Graph Theory 2. Big Data
11.	Prof. Gunjan Agarwal	Dayalbagh Educational Institute	1. Introduction to Topology 2. Some Aspects of non-Euclidean Topologies
12.	Dr. Shiroman Prakash	Dayalbagh Educational Institute	1. Fault tolerant quantum computing and magic state distillation. 2. Magic state distillation and qudits of odd prime dimension.
13.	Prof. Karmeshu	President TIMC, Shiv Nadar University	1. Power Law in Communication Networks: Maximum Entropy Framework

REGISTRATION: Registration is open upto 17th April 2019

You can Register by clicking on “[Click here to Register](#)” at the DEI web portal in the announcement section

Registration Fee: Rs. 1000/- for Teachers & Rs. 500/- for Students and Scholars

Online Registration Fees may be deposited in:

Account Name: **DEI Conference Account**

A/c. No: 305601010291491

IFSC Code: UBIN0530565

Branch : Dayalbagh, Agra

Note: 1. Please bring proof of your registration fee paid.

2. No stay arrangement for the participants will be provided by the organizers of the workshop, however we can facilitate your stay arrangement in nearby lodges/hotels at reasonable cost.

For any clarifications please contact:

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Venue : International Seminar Hall Complex, DEI

Co-Ordinators

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