

About the Workshop

Aim: This workshop aims to enhance participants' proficiency in employing approximation techniques for tackling intricate challenges in stochastic calculus and computational finance, through practical applications and interactive sessions. Attendees will gain valuable skills that will empower them to navigate and solve real-world problems effectively in the dynamic landscape of financial modelling and analysis.

Scope: With recent advances in state-of-the-art computing, it is now possible to solve problems with added complexities, such as those that are introduced by stochastic modelling. The scope of this workshop would therefore cover robust approximation techniques involving stochastic analysis and simulations for problems in stochastic calculus and computational finance. This workshop will encourage interactive learning through in-depth discussions on real-world applications of mathematical finance.

International/ National Advisory Committee

1. Prof. Jong Min Kim; Division of Science and Mathematics, University of Minnesota- Morris, MN 56267, USA.
2. Prof. A.M. Elsayah; Division of Science and Technology, Beijing Normal University-Hong Kong Baptist University United International College, Zhuhai 519085, China.
3. Professor Ong Seng Huat, Institute of Actuarial Science and Applied Statistics, UCSI University, Malaysia.
4. Prof. Kamal Raj Pardasani, MANIT, Bhopal.
5. Dr. Manil T Mohan, IIT, Roorkee.
6. Prof. Akash Ashirbad Panda, IIT Bhubaneshwar.
7. Prof. Naveen Kango, Director of Academic Affairs, Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P.
8. Prof. Horel Thomas, Director of Research & Development, Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P.
7. Prof. Ajeet Jaiswal, Director of Faculty Affairs, Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P.
8. Prof. Sushil K. Kashaw, Dept. of Pharmaceutical Sciences, Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P.

Chief Guest



*Shri Atul Bhai Kothari
Secretary, Shiksha Sanskriti Utthan Nyas,
New Delhi*

Chief Patron



*Prof. Neelima Gupta
Hon'ble Vice Chancellor
Dr. Harisingh Gour Vishwavidyalaya, Sagar, M.P.*

Speakers



*Prof. K. Palidar
Senior Professor
Department of Mathematics,
University of the Western Cape, South Africa*



*Dr. Debopriya Mukherjee
Assistant Professor,
Department of Mathematics
IIT Indore*



*Prof. G. K. Vishwakarma
Department of Mathematics & Computing,
IIT Dhanbad*

Patron



*Prof. Ashish Verma
Dean, School of MPS*

Patron



*Prof. Diwakar Shukla
Head, Dept. of Mathematics & Statistics*

Convener



*Prof. R. K. Gangele
Dept. of Mathematics & Statistics*

Organising Secretary



*Ms. Shivani Khare
Assistant Professor
Department of Vedic Studies*



5 - Days International Workshop On Approximation Techniques to Solve Problems in Computational Finance 26-30 April 2024

Organized by

Department of Mathematics &
Statistics,
Dr. Harisingh Gour
Vishwavidyalaya, Sagar,
Madhya Pradesh, 470003



About the University

Dr. Harisingh Gour Vishwavidyalaya Sagar (A Central University), formerly University of Saugar, was established on 18th July 1946 by Dr. Sir Hari Singh Gour (Nov. 26, 1870 – Dec. 25, 1949) by his lifetime savings. This is the 18th University of India and the oldest and the biggest University of Madhya Pradesh. The University is situated 5 Km east of Sagar city and its campus covers an area of 1312.89 acres over Pathariya hills connected to the Vindhya Range, surrounded by lush green forest. It has 36 University teaching departments (a number that keeps growing), 11 schools and 19 affiliated colleges. The Department of Mathematics & Statistics is one of the oldest department of the University.

About the city

Sagar (formerly Saugar) is a city in the state of Madhya Pradesh in central India and situated on a spur of the Vindhya Range. The city is around 172 km northeast of state capital Bhopal.

Places of tourist interest around Sagar:

Sanchi (SH18, 140KM), Khajuraho (Sagar Khajuraho via Chattarpur (200Km), Eran (Sagar- Bina Road 85 Km)

About the Speakers

Prof. K. Patidar is currently working as a Senior Professor of Mathematics, University of the Western Cape, South Africa. He received his PhD (Mathematics) in 2002 from Indian Institute of Technology (IIT) Kanpur, India. He visited universities of Tuebingen (Germany) and Pretoria (South Africa) for his postdoctoral studies. He received a C2 Rating (established researcher) from the South African National Research Foundation for the period 2010-2015; 2016-2021 and C1 rating for the period 2022-2027. His research involves mathematical methods and scientific computing for application problems that arise from the interactions between natural and life sciences as well as those from the engineering domain. He has published more than 100 research papers in journals of international repute and supervised 22 PhD theses. He is a reviewer of several peer reviewed journals. Some of his important research publications in the field of computational finance are listed on

<https://www.uwc.ac.za/Biography/Pages/01Prof.-Kailash-Patidar.aspx>

Dr. Debopriya Mukherjee is currently working as an Assistant Professor Grade-I, Department of Mathematics, IIT Indore. She obtained her PhD (Mathematics) in 2018 from the Department of Mathematics, Indian Institute of Science Education and Research (IISER), Thiruvananthapuram, India. She has held prestigious positions as a Marie Skłodowska-Curie Fellow in Austria and a Postdoctoral Fellow in Australia, where she made significant contributions to Probability Theory, Stochastic Processes, and Mathematical Fluid Dynamics. For more detail, please visit

<https://math.iiti.ac.in/faculty/>

Prof. Gajendra K. Vishwakarma is currently working as Professor in the Department of Mathematics & Computing, Indian Institute of Technology (Indian School of Mines) Dhanbad, India. He obtained his PhD (Statistics) in 2007 from Vikram University Ujjain, India. He worked in both theoretical as well as applied statistics and has several years of academic and industrial research experience. He is recipient of SIRE Fellowship Govt of India. He has published numbers of research papers in web of science listed journals and supervised 13 PhD theses. Further details about his academic and research credentials can be seen on

https://www.iitism.ac.in/current_faculty

The focus:

Numerical Approximation Methods,
Stochastic Differential Equations,
Mathematical Finance

Target Audience

Undergraduate students, Postgraduate students, Research, Postdoctoral fellows, and Faculty members with a background in numerical analysis or mathematics finance.

Call for Poster Presentation

We invite individuals to present poster on April 30th from 10:00 AM to 12:00 PM. Abstracts must be submitted through the provided Google Form link.

Awards will be given to winners of poster presentation.



Registration Details

Click here to register:

<https://forms.gle/z5YEhKyyWVagiT9A>

Deadline of registration:

15-04-2024

Fee Details

Faculty/ Industry Person: 5000/- for offline participants, 3000/- for online participants.

Research Scholar: 2000/-

Student (UG/PG): 1500/-

Foreign Person: \$120

Account Details

Name of A/C Holder: Registrar, IWOATSPCF MATH
DEPT. DHSGSU

Account No.: 42811710643

Bank Name: State Bank of India

Branch: Sagar University, Sagar

IFSC code: SBIN0001143

Contact Person:

Prof. R. K. Gangele

Department of Mathematics & Statistics

Dr. Harisingh Gour Vishwavidyalaya, Sagar M.P.

Email: iwoatspcf@gmail.com

Contact No. 8319134233