## International Symposium on Applied Mathematics and Soft Computing



Centre for Mathematical Modelling **Department of Mathematics** University of Colombo



## **PROGRAMME SCHEDULE**

## 25 - 01 -2024

Session	I: Technical	Session (0	9.00 am -	12.15 pm)

Symposium Co-Chairs: Prof. Naleen Ganegoda, Dr. Navnit Jha, Dr. Nayana Wanasinghe Coordinator: Ms. Sajini Vindula (Email: sajiniwittahachchi@gmail.com, Phone:0755550442)

Zoom Link	https://learn.zoom.us/j/95491339234?pwd=UjhQZIFKYzY0NXdnRXNTaXhZZW9xZz09			
Time	Name	Title		
09.00 am - 09.15 am	Niranjan	3-step sixth-order accurate BLAGE Iterative Method for two-dimensional Helmholtz Equation		
09.15 am - 09.30 am	Prathu Bajpai	DE-Sim: Differential Evolution-based Simulator for Solving Complex Optimization Problems		
09.30 am - 09.45 am	Abhishek Bhatia	Multi-Objective Optimization based on Genetic Algorithm: A Survey of the state of the art		
09.45 am - 10.00 am	A. M. Mohiuddin	An enhanced linear prediction evolution algorithm based on nonlinear least square fitting technique for optimization		
10.00 am - 10.15 am	Ankit Pandey	Adams type numerical method of order three for generalized fractional initial value problem.		
10.15 am - 10.30 am	Niher Ranjan Das	An adaptive Intuitionistic Fuzzy Soft Similarity Measure and its Application to Clustering		
10.30 am - 10.45 am	Kritika	Two-point BVPs with F-transform and hyperbolic basis		
10.45 am - 11.00 am	Ekansh Mallik	A unified gradient based physics informed neural network for solving nonlinear local fractional differential equations		
11.00 am - 11.15 am	Shikha Verma	An Integral Matrix Based Approach to Solve Differential Equations		
11.15 am - 11.30 am	Obaidullah Wardak	Encryption and Decryption of Signed Graph Matrices Through RSA Algorithm		
11.30 am - 11.45 am	Sandeep Kumar	Energy analysis and algorithmic generation of Splitting Signed Graphs		
11.45 am - 12.00 pm	Sachin Somra	The derived signed graphs on Cayley sum graphs		
12.00 pm - 12.15 pm	Ashutosh Tiwari	IVIFS-TOPSIS for Supplier Selection Problem		

## Session II: Invited Talks (01.00 pm - 04.30 pm)

Session Co-chairs: Dr. Prabath Liyanage, Dr. Sulanie Perera Coordinator: Ms. Sarani Silva (Email: saranissilva@gmail.com, Phone: +94779247891)

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01.00 pm - 01.30 pm	Prof. Deepa Sinha	Encryption using signed graphs	
01.30 pm - 02.00 pm	Dr. Q.M. Danish Lohani	Generalized Fuzzy TOPSIS for Hospital location Problem	
02.00 pm - 02.30 pm	Dr. Saroj K Sahani	A Delayed Model for Bacteria-Bacteriophage Interaction	
02.30 pm - 03.00 pm	Dr. Jagdish Chand Bansal	Drone Swarm: Concept, Challenges and Applications	
03.00 pm - 03.30 pm	Dr. Navnit Jha	Fuzzy Component Scheme for Differential Equations	
03.30 pm - 04.00 pm		Uniformly convergent hybrid scheme for singularly perturbed delay problems with integral boundary condition	
04.00 pm - 04.30 pm	Dr. Venu Gopal	Discontinuous Galerkin Method for Hyperbolic Equations	