

Abdus Salam School of Mathematical Sciences
GC UNIVERSITY, LAHORE
Two Days National Conference on:
Latest Trends in Mathematical Modeling and Simulation
December 14-15, 2021



Program Schedule

LTMMS-2021

Program Schedule

Day-1		
14.12.2021 (Tuesday)		
9:00-9:45	Conference Opening: <ul style="list-style-type: none"> Recitation of the Holy Quran Welcome note by the Director General, ASSMS (Prof. Dr. Mujahid Abbas) Address of the Vice Chancellor, GC University Lahore (Prof. Dr. Asghar Zaidi) Distribution of shields of 1st day Speakers 	
Session-1 Chair: Prof. Dr. Mujahid Abbas / Prof. Dr. Fiazud Din Zaman	9:45-10:15 Prof. Dr. Asghar Zaidi (T.I.) Vice Chancellor, GC University Lahore Title: <i>Mathematical Modeling and Simulation in social sciences</i>	
	10:15-10:45 Prof. Zafar-ullah Koreshi Professor (Senior Dean), Mechatronics Engineering, Air University, Islamabad Title: <i>Monte Carlo Simulation in Science in Engineering</i>	
	10:45 -11:15 Prof. Dr. Tasneem Mohammad Shah Former Scientist Dr. A. Q. Khan Research Laboratories (KRL) and Professor in mathematics at Air University Pakistan and Preston University Islamabad Title: <i>Numerical solutions of Single and two phase flow using Finite difference and mesh less methods</i>	
	11:15-11:30	TEA BREAK
	11:30-12:00 Prof. Dr. Shamsul Qamar Professor, Department of Mathematics, COMSATS University, Park Road, Islamabad Title: <i>Modeling and Simulation of Gradient Elution Liquid Chromatography</i>	
Session-2 Chair: Dr. Azhar Ali Zafar	12:00-12:30 Prof. Dr. Fiazud Din Zaman ASSMS, GC University, Lahore Title: <i>On Perturbation Technique in Real Life Problems</i>	
	12:30-1:00 Prof. Dr. Sirajul Islam University of Engineering & Technology, Peshawar Title: <i>Meshless Methods for Coupled Interface PDEs and Structural Heat Optimization</i>	
	1:00-2:00	PRAY & LUNCH BREAK
	2:00-2:25 Dr. Muhammad Imran Associate Professor, Department of Mathematics, GC University Faisalabad, Pakistan Title: <i>Effects of combined magnetic and porosity on nano particles in a tangent hyperbolic fluid flow over a stretching plate with gyrotactic microorganism</i>	
	2:25-2:50 Dr. Naveed Anjum Department of Mathematics, GC University Faisalabad Title: <i>Nonlinear oscillatory behaviour of the doubly-clamped microbeam Type microelectromechanical system</i>	

Session-3 Chair: Dr. Muhammad Imran	12:00-12:30	Dr. Umair Rashid Department of Mathematics, Preston University Islamabad Title: <i>Mathematical Modeling and simulation for nanofluid flow and heat transfer with shape effects of nanoparticles</i>
	3:15-3:40	Mr. Akhtar Hussain (ASSMS) / Dr. Taj Munir Title: <i>Mathematical Modeling of mechanical vibrations and simulation with novel technique.</i>
	3:40-4:00	PRAY & TEA BREAK
	4:00-4:25	Ms. Zain Majeed (ASSMS) / Dr. Jamshaid Ul Rahman Title: <i>Investigation on the usage of hand sanitizer and face mask to control covid-19 by mathematical modeling</i>
	4:25-4:50	Ms. Faiza Arif (ASSMS) / Dr. Noor Muhammad Title: Mathematical Modeling and Numerical Simulation for the Outbreak Covid-19 Involving Loss of Immunity and Quarantine Class
	4:50-5:15	Ms. Zill-E-Huma (ASSMS) Title: Elliptic curves in mathematical cryptography

Day-2 15.12.2021 (Wednesday)		
Session-4 Chair: Dr. Shamsa Kanwal	9:00-9:30	Dr. Abdul Samad Department of Mathematics, University of Peshawar Title: <i>Boundary layer flow and transition from laminar to turbulent flows over various geometrical shapes</i>
	9:30-10:00	Dr. Masood Ur Rehman Assistant Professor, Department of Mathematics, University College of Zhob, Balochistan University of Information Technology, Engineering and Management Sciences, BUITEMS, Zhob. Title: <i>Mathematical Modeling of Molecular Graphs to study their energies (using Spectral Graph).</i>
	10:00-10:30	Dr. Muhammad Usman Farid UAF Faisal Abad Title: CFD as an Applied Mathematical Tool for Solving Large Scale Industrial Problems
	10:30-11:00	Mr. Naeem Ullah PhD scholar QAU Islamabad Title: <i>Modeling and simulation of nanofluid flow inside a cavity influenced by a heated rod</i>
	11:00-11:15	TEA BREAK
Session-5 Chair: Dr. Abdul Samad	11:15-11:40	Dr. M Hussan Mahmood Mann Department of Mathematics, GC University Faisalabad, Pakistan Title: <i>Mass transfer analysis for transient flow of thin film on stretched plate.</i>
	11:40-12:05	Dr. Saba Inam Department of Mathematical Sciences, Faculty of Science and Technology, Fatima Jinnah Women University, The Mall, Rawalpindi Title: <i>A Secure Public Key Cryptosystem Model and Digital Signatures</i>
	12:05-12:30	Dr. Shamsa Kanwal Department of Mathematical Sciences, Faculty of Science and Technology, Fatima Jinnah Women University, The Mall, Rawalpindi Title: <i>A Novel Mathematical Model for Color Image Encryption Based on the Chaos System and Color Codes</i>
	12:30-12:55	Dr. Azhar Ali Zafar Department of Mathematics, GC University, Lahore Title: A mathematical model of magneto-free-convection flow of a rate type fluid
	1:00-2:00	PRAY & LUNCH BREAK
Session-6 Chair: Dr. Saba Inam	02:00-2:30	Dr. Ghaus ur Rahman, University of Swat, Swat Title: Mathematical modeling of epidemic model
	2:30-3:30	Dr. Andrew Omame ASSMS, GC University, Lahore Title: <i>Analysis of a Fractional Order Model for COVID-19 and Tuberculosis co-infection</i>
	3:00-3:30	Mr. Salman Aleem Director Modeling & Simulation, Pakistan Air Force, Islamabad Title: <i>Use of Simulations in Military Training and Analysis</i>
03:30	Closing Ceremony by: Vice Chancellor, GC University Lahore - Prof. Dr. Asghar Zaidi (T.I.) • Distribution of shields of 2 nd day Speakers and Organizers	
4:00	Close with TEA	