

Tentative Scientific Program:

Day I: Thursday November 23, 2023 (F1, Room # 0046)		
Time	Speaker	Title of the talk
8:30—9:00	Registration & Information	
9:00—9:30	Opening	
9:30—10:30	<b>Keynote Speaker I</b> , Chaired by Prof. Fathalla Rihan	
	<b>Prof. Gennady Bocharov</b> Russian Academy of Sciences, Moscow	<b>Understanding the pathogenesis of virus infections using mathematical models based on delay differential equations</b>
10:30—11:30	<b>Keynote Speaker I</b> , Chaired by Prof. Gennady Bocharov	
	<b>Prof. Andreas Meyerhans</b> Spain: Universitat Pompeu Fabra	<b>Pathogenic virus infections: on fate regulation and functional cure strategies</b>
11:30—12:00	Coffee Break	
12:00—13:00	Chaired by Prof. V. Volpert and Prof. Farrukh Mohamadov	
	Prof. Radouane Yafia Morocco: Ibn Tofail University	Turing Bifurcation Induced by Cross-Diffusion and Amplitude Equation in Oncolytic Therapeutic Model
	Prof. Abdulla Azamov Uzbekistan: Institute of Mathematics	Cinematographic Method for Mathematical Modeling of Heat Transfer and Exchange Processes in Geometrically Complicated Bodies
13:00—14:00	Lunch	
14:00—16:00	Chaired by Dr. Abdessamad	
	Prof. Fathalla Rihan UAE: UAEU	Qualitative and Quantitative Features of DDEs and Applications to Immunology
	Prof. Jiayu Li USA: University of Louisville	Impulsive Delay Differential Equations with Delayed-Effective Inputs
	Dr. Ardak KASHKYNBAYEV Kazakhstan: Nazarbayev University (AUA)	Traveling wave speed and profile of a "go or grow" glioblastoma multiforme model
	Prof. Attila Denes Hungary: University of Szeged	Malaria dynamics with bimodality of incubation period in hosts in a seasonal environment
	Dr. Khalid Muhammad UAE: UAEU (AUA)	Role of the NFAT-signaling network in controlling allergic skin reactions
	Prof. Kalyan Das India: NIFTEM	Time Lag Effect of Prey Predator Model with Allee Effect

16:00—18:00	<b>Day I: Parallel Session I, Thursday November 23, 2023 (F1, Room # 0046)</b>	
16:00—18:00	<b>Speaker</b>	<b>Title of the talk</b>
	Prof. Syed Abbas India: Indian Institute of Technology Mandi	Analysis and stability of a social interaction model with age-structure and law enforcement
	Dr. Rajivganthi, C India: Vellore Institute of Technology	Control Analysis of Nilaparvata Lugens with Wolbachia using Sterile Insect Techniques
	Dr. Hebatallah Alsakaji UAE: UAEU (AUA)	Optimal Control of Stochastic Michaelis-Menten Kinetics Based Tumour-Immune Interaction with Time Delay
	Prof. Mohamed N. Anwar Egypt: Faros Uni.	DETERMINISTIC AND STOCHASTIC SIRC EPIDEMIC MODEL WITH TIME-DELAY FOR COVID-19
	Ms. Ghilmana Sarmad UAE: UAEU (AUA)	Exploring the Influence of Fear on the Progression of an Infectious Disease in a Delayed Spatiotemporal Epidemic Model Featuring Both Local and Nonlocal Dispersion
	Mr. Nali Ibrahim Morocco: University of Szeded	Dynamical analysis of an HIV infection model including quiescent cells and immune response
	Mr. Ahmed ELMWAFY Portugal: University of BeiraInterior	EXISTENCE AND EXPONENTIAL STABILITY OF A PERIODIC SOLUTION OF AN INFINITE DELAY DIFFERENTIAL SYSTEM WITH APPLICATIONS TO COHEN-GROSSBERG NEURAL NETWORK MODELS
	Prof. Y. A. El-Khatib UAE: UAEU (AUA)	The SEIR model With Unreported Cases and Markovian Switching
16:00—18:00	<b>Day I, Parallel Session II (Fractional Order DEs):</b> Chaired by Dr.	
	Prof. Nasser Sweilam Egypt: Cairo University	Crossover Dynamics of Hybrid Fractional Order Monkeypox Disease Model with Time Delay: Numerical Simulations
	Dr. Isa Abdullahi Baba Nigeria: Bayero University Kano	Dynamics of HIV-COVID-19 Co-Infection: A Fractional Order Model and Analysis using Laplace- Adomian Decomposition Method
	Dr. K. Udhayakumar UAE: Zayed University	A fractional-order delay differential tumor-immune model: external treatment and optimal control strategies
	Dr. Getachew T. Tilahun Ethiopia: Haramaya University	Fractional ordered model for cell level viral transmission dynamics with adaptive immunity
	Mr. Shyamsunder India: Malaviya National Institute of Technology	ANOVELINVESTIGATIONOFTHETUBERCULOSIS DISEASEVIA FRACTIONAL DIFFERENTIAL OPERATOR
	Dr. CHANDAN MAJI India: Jagannath Kishore College	Impact of fear of a fractional-order plant disease model with herbivore attack

<b>16:00—18:00</b>	<b>Day I, Parallel Session III (Fractional Order DEs):</b> Chaired by Dr.	
	Dr. S DINESH KUMAR India: VELLORE INSTITUTE OF TECHNOLOGY	HIGHER ORDER NUMERICAL SCHEME FOR SINGULARLY PERTURBED DELAY DIFFERENTIAL EQUATIONS WITH SMALL SHIFT ARISING IN BIO SCIENCE
	Ms. TAIMUN QAISAR UAE: UAEU (AUA)	QUADRATIC STOCHASTIC PROCESSES ASSOCIATED WITH SIR MODELS
	Dr. Tri Thanh Pham Kazakhstan: Nazarbayev University	Multivariate models for assessing the effects of nanoparticles on bacterial growth
	Dr. KÁROLY NAGY Hungary: Eszterházy Károly Cotholic University	A NUMERICAL SOLUTION OF INITIAL VALUE PROBLEMS BY WALSH POLYNOMIALS APPROACH
	Dr. Dipo Aldila Indonesia: Universitas Indonesia (AUA)	Bifurcation analysis on the impact of novel TB vaccine
	Dr. Mohamed Saadaoui Algeria: Amaal Tleidji University	Existence and stability of solution for fractional wave equation of $\beta(x)$ -Laplace type with viscoelasticity

Day II: Friday November 24, 2023 (F1, Room # 0046)

Time	Speaker	Title of the talk
9:00—10:00	<b>Keynote Speaker I</b> , Chaired by Dr Abdessamd	
	<b>Prof. V. Volpert</b> France: CNRS University Lyon 1	<b>Mathematical modelling of respiratory viral infections</b>
Coffee Break		
10:30—12:10	<b>Day II, Parallel Session I:</b> Chaired by Dr. Ibrahim Elmojtaba	
10:30—10:50	Dr. Kifah Almaqrashi Oman: Sultan Qaboos University	Mathematical Analysis and Parameter Estimation of a Two-Patch Zika Model
10:50—11:10	Dr. Tahani Al Sariri Oman: Sultan Qaboos University	Optimal heat transport induced by magnetic nanoparticle delivery in vascularized tumours
11:10—11:30	Dr. Debasis Mukherjee India: Department of Mathematics Vivekananda College	Global analysis of an SEI plant disease model with saturation incidence rate
11:30-11:50	Mr. M. Manivel India: AVVM Sri Pushpam College	A New Investigation on the Impact of Vaccination on the Transmission of Monkeypox
11:50-12:10	Prof. Samares Pal India: Indian Inst. of Information Technology	A SEASONALLY FORCED ECO-EPIDEMIC PREDATOR-PREY MODEL FOR THE IMPACTS OF FEAR AND ITS CARRY-OVER EFFECT WITH SELECTIVE PREDATION

10:30—12:30	<b>Day II, Parallel session II (Kazakhstan Group):</b> Chaired by Dr. Ardak KASHKYNBAYEV	
	Dr. Soundararajan Ganesan Kazakhstan: Nazarbayev University (AUA)	Robust Exponential $H^\infty$ Filtering for Discrete-Time Complex-Valued Neural Networks with Time-Varying Delays
	Ms. Aisha TURSINKOZHA Kazakhstan: Nazarbayev University (AUA)	Structured dynamics of the cell-cycle at multiple scales
	Dr. Abduzhappar GAIPOV Kazakhstan: Nazarbayev University (AUA)	In-depth epidemiology and modeling of the future trends of communicable and non-communicable diseases in Kazakhstan using aggregated big data from the Unified National Electronic Healthcare System
	Mrs. Madina Otkel Kazakhstan: Nazarbayev University (AUA)	Finite-time/fixed-time synchronization of memristive shunting inhibitory cellular neural networks via sliding mode control
	Dr. KATHIRESAN S Kazakhstan: Nazarbayev University (AUA)	Multi-stability analysis of fractional-order quaternion-valued neural networks with time delay
	Mr. Zhangir Nuriyev Kazakhstan: Nazarbayev University (AUA)	Finite-time synchronization for fuzzy shunting inhibitory cellular neural networks

<b>10:30—12:30</b>	<b>Day II, Parallel session III</b> : Chaired by Dr.	
	Dr. Amar Ould Hammouda Algeria: Ecole Normale Supérieure Kouba	Asymptotic Behavior of the Stokes Problem with Robin condition in a Domain with tiny Holes
	Dr. KARMAND K. AHMAD Iraq: Soran University	DYNAMICS OF HEARING LOSS CAUSED BY NOISE HAZARD WITH TIME DELAY
	Dr. Khedidja Abidi Algeria: Amaal Tleidji University	On the existence and stability of a viscoelastic Petrovsky equation with retard vary and a Logarithmic source term
	Dr. Ahmed ELMWAFY Portugal: University of Beira Interior	EXISTENCE AND EXPONENTIAL STABILITY OF A PERIODIC SOLUTION OF AN INFINITE DELAY DIFFERENTIAL SYSTEM WITH APPLICATIONS TO COHEN-GROSSBERG NEURAL NETWORK MODELS
	DR. PRASENJIT DAS India: SRICHANDA MAHENDRANATH MEMORIAL INSTITUTION	STUDY THE DYNAMIC EPIDEMIOLOGICAL MODEL FOR DENGUE TRANSMISSION WITH INCUBATION PERIOD AND SATURATED TREATMENT FUNCTION
	Dr BOOTAN RAHMAN Iraq: University of Kurdistan Hewler	STABILITY AND HOPF BIFURCATION ANALYSIS IN A DISCRETE AND DISTRIBUTED DELAYED NEURAL NETWORK MODEL WITH INERTIAL COUPLING
<b>12:30—14:30</b>	Lunch Break	

<b>Day II, Parallel session III (Room # )</b>		
<b>Time</b>	<b>Speaker</b>	<b>Title of the talk</b>
<b>14:30—18:00</b>	<b>Day II, Parallel Session IV:</b> Chaired by Prof.	
	Dr. Abdessamad Tridane UAE: UAEU (AUA)	Dynamics of A Delayed Spatiotemporal HBV Infection Model with Capsids, CTL Immune Response and General Incidence Function
	SHRADDHA SALWAHAN India: Indian Institute of Technology	OPTIMAL CONTROL OF A PERIODICALLY SWITCHED EPIDEMIC MODEL
	Dr. Adel Hashish UAE: UAEU (AUA)	Improved lung model for predicting aerosol deposition in lung airways
	Prof. Abdallah Rababah UAE: UAEU (AUA)	Degree Reduction of Bezier Curves
	Mr. Americo Matusse South Africa: University of Pretoria	TRAVELING WAVE SOLUTIONS ON SYNERGISTIC CO-INFECTION MODEL IN CROP DISEASES
	Prof. Motassem Alarydah UAE: Khalifa University	Mathematical Model Integrating Vaccine and Variable Immunity Period in Infectious Disease Dynamics

<b>14:30—18:00</b>	<b>Day II, Parallel session V (Room # )</b>	
	Dr. Ahoud Alsheri Saudi Arabia: University of Bisha	Mathematical modeling of the effect of quarantine rate on controlling the infection of COVID19 in the population of Saudi Arabia
	Dr. Joshua K. Asamoah Ghana: Kwame Nkrumah University of Science and Technology	Comprehensive cost-effectiveness analysis of a new compartmental model for bacterial meningitis considering the influence of the media
	Ms. Sondos M. Syam Malaysia: Universiti Malaya (AUA)	Numerical method for solving integro-differential model of biological species living together
	Dr. Joshua K. Asamoah Ghana: Kwame Nkrumah University of Science and Technology	Comprehensive cost-effectiveness analysis of a new compartmental model for bacterial meningitis considering the influence of the media
	Prof. MEHMETG TUMUS Turkey: Zonguldak Bülent Ecevit University	STABILITY AND BIFURCATION ANALYSIS OF AN SIR EPIDEMIC MODEL
	Mr KEMAL TURK Turkey: Zonguldak Bülent Ecevit University	ON THE NONSTANDARD NUMERICAL DISCRETIZATION OF AN SIR EPIDEMIC MODEL
<b>Dinner 7—9 PM</b>	<b>Friday 24-11-2023</b>	
<b>14:30—18:00</b>	<b>Day II, Parallel session VI (Room # )</b>	
	Dr. Emad E. Elmahdy Saudi Arabia: King Saud University (AUA)	Reliability Modelling of Heterogeneous Data by Using Different Competing Weibull Mixture Models
	Ms. Shraddha Salwahan India: Indian Institute of Technology	OPTIMAL CONTROL OF A PERIODICALLY SWITCHED EPIDEMIC MODEL
	Prof. Qing Li China: Shijiazhuang Traditional Chinese Hospital	A continuum space is the infinitely great
<b>Dinner 7—9 PM</b>	<b>Friday 24-11-2023</b>	