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	**Keynote Speaker I**, Chaired by Prof. Fathalla Rihan	
	Prof. Gennady Bocharov **Russian Academy of Sciences, Moscow**	**Understanding the pathogenesis of virus infections using mathematical models based on delay differential equations**
10:30—11:30	**Keynote Speaker I**, Chaired by Prof. Gennady Bocharov	
	Prof. Andreas Meyerhans **Spain: Universitat Pompeu Fabra**	**Pathogenic virus infections: on fate regulation and functional cure strategies**
11:30—12:00	Coffee Break	
12:00—13:00	Chaired by Prof. V. Volpert and Prof. Farrrukh 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. Jiaxu Li **USA: University of Louisville**	Impulsive Delay Differential Equations with Delayed-Effecffve 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 hostsina 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	Day I: Parallel Session I, Thursday November 23, 2023 (F1, Room # 0046)	
16:00—18:00	Speaker	Title of the talk
	Prof. Syed Abbas India: Indian Institute of Technology Mandi	Analysis and stability of a social interacon 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 Szeged	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	**Day I, Parallel Session II (Fractional Order DEs)**: 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

16:00—18:00	**Day I, Parallel Session III (Fractional Order DEs)**: 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: Amaar Tleidji University**	Existence and stability of solution for fractional wave equation of β(x)-Laplace type with viscoelasticity

Day II: Friday November 24, 2023 (F1, Room # 0046)		
Time	**Speaker**	**Title of the talk**
9:00—10:00	**Keynote Speaker I**, Chaired by Dr Abdessamd	
	Prof. V. Volpert **France: CNRS University Lyon 1**	**Mathematical modelling of respiratory viral infections**
Coffee Break		
10:30—12:10	**Day II, Parallel Session I:** 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	**Day II, Parallel session II (Kazakhstan Group)**: Chaired by Dr. Ardak KASHKYNBAYEV	
	Dr. Soundararajan Ganesan **Kazakhstan: Nazarbayev University (AUA)**	Robust Exponential H∞ Filtering for Discrete-Time Complex-Valued Neural Networks with Time-Varying Delays
	Ms. Aisha TURSYNKOZHA **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

10:30—12:30	**Day II, Parallel session III**: Chaired by Dr.	
	Dr. Amar Ould Hammouda **Algeria: Ecole Normale Superieure Kouba**	Asymptotic Behavior of the Stokes Problem with Robin condition in a Domain with tiny Holes
	Dr. Khedidja Abidi **Algeria: Amaar 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
12:30—14:30	Lunch Break	

	Day II, Parallel session III (Room #)	
Time	**Speaker**	**Title of the talk**
14:30—18:00	**Day II, Parallel Session IV:** 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-INFECTIONMODELINCROPDISEASES
	Prof. Motassem Alarydah **UAE: Khalifa University**	Mathematical Model Integrating Vaccine and Variable Immunity Period in Infectious Disease Dynamics

14:30—18:00	**Day II, Parallel session V (Room #)**	
	Dr. Ahoud Alsheri **Saudi Arabia: University of Bisha**	Mathematical modeling of the effect of quarantine rateoncontrollingtheinfectionofCOVID19inthe 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 OFAN SIR EPIDEMIC MODEL
	Mr KEMAL TURK **Turkey: Zonguldak Bülent Ecevit University**	ON THE NONSTANDARD NUMERICAL DISCRETIZATION OF AN SIR EPIDEMIC MODEL
Dinner 7—9 PM	**Friday 24-11-2023**	

14:30—18:00	**Day II, Parallel session VI (Room #)**	
	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
Dinner 7—9 PM	**Friday 24-11-2023**	