

# International Conference on Difference Equations and Applications (ICDEA 2021 Virtual, CEST-Central European Summer Time)

Department of Mathematics, University of  
Sarajevo July 26 - 30, Sarajevo  
Bosnia and Herzegovina



July 26 (Monday)

Local Time	Channel	Registration and Opening (MS Team: Opening and Closing Ceremony (ICDEA 2021))		
14.15-14.30	General	Virtual Registration of Participants		
14.30-14.55	General	Reception and Opening Ceremony		
Plenary Talks (MS Team: Plenary talks (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
15.00-16.00	9.00-10.00 AM	General	Mustafa Kulenović	<b>James A. Yorke:</b> Tiny Models Can Help Us Understand Huge Models
16.05-17.05	8.05-9.05 AM	General	Elena Braverman	<b>Gail Wolkowicz:</b> A Derivation Procedure and Analysis of Two-Species Difference Equation Population Models
Contributed Talks (MS Team: Contributed talks (ICDEA 2021))				
17.05-17.30	Break			
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
17.30-17.55	9.30-9.55 AM	Room CT1	Adina Luminita Sasu	<b>Youssef Raffoul:</b> Neutral Volterra Difference Equations of Advanced Type
18.00-18.25	1.00-1.25 PM			<b>Alehandra Rodkina:</b> Stabilization of Multiple Equilibria with Stochastic Prediction-Based Control
18.30-18.55	12.30-12.55 PM			<b>Roberto De Leo:</b> Backward asymptotics in S-unimodal maps
19.00-19.25	7.00-7.25 PM			<b>Mariusz Bialecki:</b> A Stochastic Cellular Automaton with Avalanches, Distributions with Inverse-Power Asymptotics, and Motzkin Numbers Recurrence
17.30-17.55	11.30-11.55 AM	Room CT2	Eddy Kwessi	<b>Tom Cuchta:</b> Discrete Meijer G functions
18.00-18.25	1.00-1.25 PM			<b>Eduardo de Souza Boer:</b> On the Existence and Multiplicity of Solutions for a Class of Choquard Logarithmic Equations
18.30-18.55	6.30-6.55 PM			<b>Aleksandra Kapešić:</b> Positive Solutions of Thomas-Fermi Type Second-Order Difference Equations with Regularly Varying Coefficients
19.00-19.25	7.00-7.25 PM			<b>Magdalena Nockowska-Rosiak:</b> The Solvability of Discrete Boundary Value Problems on the Half-Line
17.30-17.55	8.00-8.25 PM	Room CT3	Svetlin Georgiev	<b>Mohammad Reza Ahmadi Zand:</b> Generalized Nonautonomous G-Dynamical Systems
18.00-18.25	12.00-12.25 PM			<b>John R. Graef:</b> A Variational Framework for a Second Order Discrete Boundary Value Problem with Mixed Periodic Boundary Conditions
18.30-18.55	12.30-12.55 PM			<b>Mauricio Diaz:</b> Levels of Local Chaos for Special Blocks Families
19.00-19.25	6.00-6.25 PM			<b>Luis Silva:</b> Milnor Attractors in a Family of Nonautonomous Dynamical Systems Ggenerated by Flat-Topped Tent Maps
17.30-17.55	5.30-5.55 PM	Room CT4	Victor Manosa	<b>Vesna Županović:</b> Fractal Analysis of Planar Nilpotent Singularities and Numerical Applications
18.00-18.25	7.00-7.25 PM			<b>Fatma Gamze Düzgün:</b> Anisotropic Sobolev Embeddings and the Speed of Propagation for Parabolic Equations
18.30-18.55	7.30-7.55 PM			<b>Sergey Kryzhevich:</b> Structural Stability for Dynamical Systems on Time Scales
19.00-19.25	12.00-12.25 PM			<b>Tahmineh Azizi:</b> Synchronization in Discrete-Time Dynamic Systems with Application in Biology

19:30-20:00		Break		
Special Sessions (MS Team: Special Sessions (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
20.00-20.25	2.00-2.25 PM	Global Dynamics of Monotone Discrete Dynamical Sys	Mustafa Kulenović	<b>Mustafa Kulenović:</b> Global Dynamics Results for a Class of Planar Cooperative Maps
20.30-20.55	7.30-8.00 PM			<b>Steve Baigent:</b> An Introduction to the Carrying Simplex of Competitive Population Models
21.00-21.25	3.00-3.25 PM			<b>Yevgeniy Kostrov:</b> Preliminary Results on a Rational Equation with Quadratic Term
21.30-21.55	3.30-3.55 PM			<b>Elliott Bertrand:</b> Dynamic Scenarios for Some Second-Order Monotone Difference Equations
22.00-22.25	3.00-3.25 PM			<b>E Cabral Balreira:</b> Geometry and Global Stability of 2D Periodic Monotone Maps
20.00-20.25	7.00-7.25 PM	Population Dynamics and Related Topics	Jim M. Cushing and Gail Wolkowicz	<b>Rafael Luis:</b> Linear Stability Conditions for a First Order-Dimensional Mapping
20.30-20.55	2.30-2.55 PM			<b>Stacey Smith?:</b> Using Non-Smooth Models to Determine Thresholds for Microbial Pest Management
21.00-21.25	3.00-3.25 PM			<b>Sabrina Streipert:</b> An Alternative Delayed Population Growth Difference Equation Model
21.30-21.55	12.30-12.55 PM			<b>Horst R. Thieme:</b> Population Growth Factor Versus Basic Reproduction Number in Discrete-Time Structured Two-Sex Population Models
22.00-22.25	1.00-1.25 PM			<b>Yun Kang:</b> Optimal Control of a Discrete-Time Plant-Pest Model with Bistability and Fluctuating Environments

July 27 (Tuesday)

Contributed Talks (MS Team: Contributed talks (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
9.00-9.25	8.00-8.25 AM	Room CT1	Victor Avrutin	<b>Yacine Halim:</b> Qualitative study of a p-Dimensional System of Difference Equations
9.30-9.55	8.30-8.55 AM			<b>Asma Allam:</b> Dynamical Behavior of a p-Dimensional System of Nonlinear Difference Equations
10.00-10.25	9.00-9.25 AM			<b>Amira Khelifa:</b> On the Solution of a p-Dimensional System of Difference Equations via Fibonacci Numbers
10.30-10.55	10.30-10.55 AM			<b>Jan Jekl:</b> Critical Linear Difference Equations
11.00-11.25	12.00-12.25 PM			<b>Armen Bagdasaryan:</b> On the Solution of a Third Order Linear Homogeneous Recurrence Relation with Variable Coefficients
9.00-9.25	9.00-9.25 AM	Room CT2	Peter Raith	<b>Davor Dragičević:</b> Linearization and Holder Continuity for Nonautonomous Systems
9.30-9.55	10.30-10.55 AM			<b>Adina Luminita Sasu:</b> Admissibility Criteria for Exponential Dichotomy of Discrete Nonautonomous Systems and Applications
10.00-10.25	10.00-10.25 AM			<b>Lokesh Singh:</b> A Shadowing Type Result for the Difference Equations
10.30-10.55	9.30-9.55 AM			<b>Cesar Silva:</b> Admissibility and $\mu$ -Dichotomies for Discrete Dynamics
11.00-11.25	10.00-10.25 AM			<b>Diana Mendes:</b> Occasionally Binding Constraints in the New Keynesian Model
9.00-9.25	4.00-4.25 PM	Room CT3	Roman Šimon Hilscher	<b>Linyu Peng:</b> The Modified Formal Variational Structure and Variational Integrator
9.30-9.55	9.30-9.55 AM			<b>Emma D'Aniello:</b> Linear Dynamics on $L^p$ Spaces (Part I)
10.00-10.25	10.00-10.25 AM			<b>Martina Maiuriello:</b> Linear Dynamics on $L^p$ Spaces (Part II)
10.30-10.55	10.30-10.55 AM			<b>Dušan Djordjević:</b> $L_p$ and Almost Sure Convergence of an Approximate Method Based on the Taylor Expansion of the Coefficients of Stochastic Functional Differential Equations
11.00-11.25	11.00-11.25 AM			<b>Katarina Djordjević:</b> $q$ -Regularly Varying Solutions of the Half-Linear $q$ -Difference Equation
9.00-9.25	9.00-9.25 AM	Room CT4	Fatma Gamze Düzgün	<b>Andrea Rožnjik:</b> Comparison of Tests for Oscillations in Delay/Advanced Difference Equations with Continuous Time
9.30-9.55	5.30-5.55 PM			<b>Christopher Tisdell:</b> The Roles that Shooting Methods Can Play in the Theory of Discrete Boundary Value Problems
10.00-10.25	6.00-6.25 PM			<b>Charles Stinson:</b> A Note Regarding Extensions of Fixed Point Theorems Involving Two Metrics via an Analysis of Iterated Functions
10.30-10.55	6.30-6.55 PM			<b>Saleh Almuthaybiri:</b> Existence and Uniqueness of Solutions to Discrete, Third-order Three-point Boundary Value Problems
11.00-11.25	12.00-12.25 PM			<b>Ulviye Demirbilek:</b> Investigation of the Wave Solutions of the Nonlinear Partial Differential Equations Via Improved Bernoulli Sub-Equation Function Method
Special Sessions (MS Team: Special Sessions (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
8.00-8.25	12.00-12.25 PM	Nonlinear Difference Equations and their Applicati	Jianshe Yu, Jia Li and Bo Zheng	<b>Peng Chen:</b> Periodic Motion for FPU Lattice Dynamical Systems with the Strongly Indefinite Case
8.30-8.55	2.30-2.55 PM			<b>Zhiming Guo:</b> Traveling Wavefronts of a Delayed Temporally Discrete Reaction-Diffusion Equation
9.00-9.25	3.00-3.25 PM			<b>Linchao Hu:</b> Mosquito Control Based on Pesticides and <i>Wolbachia</i>
9.30-9.55	3.30-3.55 PM			<b>Feng Jiao:</b> Approximating Gene Transcription Dynamics Using Steady-State Formulas

10.00-10.25	<b>Break</b>			
10.30-10.55	4.30-4.55 PM	Nonlinear Difference Equations and their Applicati	Jianshe Yu, Jia Li and Bo Zheng	<b>Genghong Lin:</b> Ground State Solutions of Discrete Asymptotically Autonomous Schrodinger Equations with Saturable Nonlinearities
11.00-11.25	5.00-5.25 PM			<b>Yuhua Long:</b> Impacts of Dispersal on the Dynamics of a Delayed Two-Patch Discrete SIR Disease Model
11.30-11.55	11.30-11.55 AM			<b>Juan Segura:</b> Degenerate Period Adding Bifurcation Structure of a Family of Piecewise Linear Maps
12:00-13:00	<b>Lunch Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
13.00-14.00	7.00-8.00 PM	General	Zhiming Guo	<b>Weinian Zhang:</b> Invariant Manifolds with/without Hyperbolicity
14.05-15.05	2.05-3.05 PM	General	Armengol Gasull	<b>Francisco Balibrea:</b> Homoclinic Trajectories in Dynamical Systems of Low Dimension
15.05-15.30	<b>Break</b>			
<b>Special Sessions (MS Team: Special Sessions (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
15.30-15.55	3.30-3.55 PM	Global Dynamics of Monotone Discrete Dynamical Sys	Mustafa Kulenović	<b>Naida Mujic:</b> Stability Analysis of a Certain Second Order Rational Difference Equation
16.00-16.25	5.00-5.25 PM			<b>Erkan Tasdemir:</b> Global Behavior of Certain Higher Order Difference Equation
16.30-16.55	5.30-5.55 PM			<b>Arzu Bilgin:</b> Two Dimensional Continuous Lotka-Volterra Systems with Difference Equations
17.00-17.25	6.00-6.25 PM			<b>Mansur Saburov:</b> Dynamical Systems with Stable, Ergodic, and Historic Behavior
15.30-15.55	8.30-8.55 AM	Population Dynamics and Related Topics	Jim M. Cushing and Gail Wolkowicz	<b>Elena Braverman:</b> Global Attractivity of Compartment Models and Neural Networks with a Distributed Delay
16.00-16.25	9.00-9.25 AM			<b>Azmy Ackleh:</b> Stability Results for Discrete-Time Predator-Prey Models
16.30-16.55	9.30-9.55 AM			<b>Amy Veprauskas:</b> When Can Evolution Destabilize System Dynamics?: A Case Study for a Predator-Prey Model
17.00-17.25	4.00-4.25 PM			<b>Steve Baigent:</b> Global Stability of Population Models
17.30-17.55	11.30-11.55 AM			<b>Abdul-Aziz Yakubu:</b> Strong Allee Effect and Basins of Attraction in Discrete-Time Infectious Disease Models
18.00-19.00	<b>Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
19:00-20:00	12.00-1.00 PM	General	Jim M. Cushing	<b>Saber Elaydi:</b> Non-autonomous Difference Equations/Discrete Dynamical Systems and Applications

July 28 (Wednesday)

Contributed Talks (MS Team: Contributed talks (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
9.00-9.25	10.00-10.25 AM	Room CT1	Davor Dragičević	<b>Valery Gaiko:</b> Bifurcations and Applications of Multi-Parameter Continuous and Discrete Dynamical Systems
9.30-9.55	9.30-9.55 AM			<b>Emin Bešo:</b> Stability of a Certain Class of a Host-Parasitoid Models with a Spatial Refuge Effect
10.00-10.25	10.00-10.25 AM			<b>Džana Drino:</b> Period-Doubling and Neimark-Sacker Bifurcations of a Beddington Host-Parasitoid Model with a Host Refuge Effect
10.30-10.55	11.30-11.55 AM			<b>Sinan Kapcak:</b> Some Tools for Stability and Bifurcation for Discrete Dynamical Systems
9.00-9.25	9.00-9.25 AM	Room CT2	Fabio Tramontana	<b>Michal Bezdziński:</b> Nash-Type Equilibria for Discretizations of Nonlinear Dirichlet Boundary Value Problems
9.30-9.55	8.30-8.55 AM			<b>Vivaldo Mendes:</b> Learning to Play Nash Equilibrium in Chaotic Dynamics
10.00-10.25	10.00-10.25 AM			<b>Marek Galewski:</b> Critical point theorems in annular domains with applications to nonlinear equations
10.30-10.55	10.30-10.55 AM			<b>Domagoj Vlah:</b> Analytical and Numerical Computation of the Box Dimension of Trajectories for a Class of Systems Having Degenerate Foci
9.00-9.25	9.00-9.25 AM	Room CT3	Yevgeniy Kostrov	<b>Filip Pietrusiak:</b> On the Solvability of the Discrete $\Delta$ -Laplacian Problems on Simple, Connected, Undirected, Weighted and Finite Graphs
9.30-9.55	9.30-9.55 AM			<b>Vuk Vujović:</b> Dynamical Behavior of the Stochastic Hepatitis C model
10.00-10.25	9.00-9.25 AM			<b>Issam El Hamdi:</b> Robust Stability of Stochastic Dynamical Systems With Varying Delays
10.30-10.55	9.30-9.55 AM			<b>Fandi Sun:</b> Strong Convergence of Adaptive Milstein Methods for SDEs
9.00-9.25	8.00-8.25 AM	Room CT4	Michal Fečkan	<b>Rajae Ben Taher:</b> Solving the Linear Difference Equation with Periodic Coefficients via Linearly Recurring Sequences
9.30-9.55	1.00-1.25 PM			<b>Jagan Mohan Jonnalagadda:</b> Stability and Asymptotic Behaviour of a Linear Nabla Fractional Difference Equation
10.00-10.25	1.30-1.55 PM			<b>Gokula Nanda Chhatra:</b> Oscillation of Second Order Impulsive Neutral Difference Equations of Non-Canonical Type
10.30-10.55	2.00-2.25 PM			<b>Jyoti Kori:</b> Numerical Study on the Filtration Efficiency of Upper Generation of Human Lung
Special Sessions (MS Team: Special Sessions (ICDEA 2021))				
Local Time	Speaker's Time	Channel	Chair	Speaker and Title
8.00-8.25	8.00-8.25 AM	Invertible and Noninvertible Maps - Theory and App	Laura Gardini and Iryna Sushko	<b>Viktor Avrutin:</b> Period 2 Implies Chaos: the Hidden Bridge Between Continuous and Discontinuous Worlds
8.30-8.55	8.30-8.55 AM			<b>Gian Italo Bischi:</b> Non Connected Basins in Club Goods Adaptive Binary Games
9.00-9.25	9.00-9.25 AM			<b>Nicolo Pecora:</b> Dynamics of a New Keynesian Model with Heterogeneous Expectations: the Role of Monetary Policy
9.30-9.55	9.30-9.55 AM			<b>Lorenzo Cerboni Baiardi:</b> Bubbling, Riddling, Blowout and Critical Curves
10.00-10.25	10.00-10.25 AM			<b>Antonio Garijo:</b> Dynamics of the Secant Map Near a Critical 3-cycle
10.30-10.55	10.30-10.55 AM			<b>Armengol Gasull:</b> Periodic Solutions of Perturbed Globally Periodic Discrete Dynamical Systems
11.00-11.25	11.00-11.25 AM			<b>Francesca Grasseti:</b> Nonlinear Dynamics in Real Economy and Financial Markets. The role of Dividend Policies in Fluctuations

10.00-10.25	4.00-4.25 PM	Nonlinear Difference Equations and their Applicati	Jianshe Yu, Jia Li and Bo Zheng	<b>Yantao Shi:</b> Discrete Dynamical Models on <i>Wolbachia</i> Infection Frequency in Mosquito Populations with Biased Release Ratios
10.30-10.55	4.30-4.55 PM			<b>Rong Yan:</b> Global Dynamics for a Mosquito Population Suppression Model Interfered by <i>Wolbachia</i> -infected Males Causing Incomplete Cytoplasmic Incompatibility
11.00-11.25	5.00-5.25 PM			<b>Huafeng Xiao:</b> Periodic Solutions with Prescribed Minimal Period to Hamiltonian Systems
11.30-11.55	5.30-5.55 PM			<b>Chu-fen Wu:</b> Propagation Dynamics in a Heterogeneous Reaction-Diffusion System Under a Shifting Environment
12:00-13:00	<b>Lunch Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
13.00-14.00	7.00-8.00 PM	General	Bo Zheng	<b>Jianshe Yu:</b> A Periodic Discrete Dynamical Model on <i>Wolbachia</i> Infection Frequency in Mosquito Populations
14.05-15.05	2.05-3.05 PM	General	Steve Baigent	<b>Peter E. Kloeden:</b> Lattice Difference Equations
15.05-15.30	<b>Break</b>			
<b>Special Sessions (MS Team: Special Sessions (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
15.30-15.55	10.30-10.55 AM	Topological and Low-Dimensional Dynamics	Lubomir Snoha	<b>Ana Anušić:</b> Local Structure of Inverse Limit Spaces
16.00-16.25	4.00-4.25 PM			<b>Andrzej Bis:</b> Metric Versus Topological Receptive Entropy of Semigroup Actions
16.30-16.55	4.30-4.55 PM			<b>Jose S. Canovas:</b> The Dynamics of a Four-Step Feedback Procedure to Control Chaos
17.00-17.25	5.00-5.25 PM			<b>Jernej Činč:</b> Genericity of Pseudo-Arc in Various Classes of Interval Inverse Limits
17.30-17.55	6.30-6.55 PM			<b>Lyudmila Efremova:</b> Periodic Points of Geometrically Integrable Maps in the Plane
18.00-18.25	6.00-6.25 PM			<b>Francisco Balibrea:</b> On Shifts and Distributional Chaos
15.30-15.55	5.30-5.55 PM	Population Dynamics and Related Topics	Jim M. Cushing and Gail Wolkowicz	<b>Ziyad AlSharawi:</b> The Role of Vigilance on a Discrete-Time Predator-Prey Model
16.00-16.25	9.00-9.25 AM			<b>Jia Li:</b> Discrete-Time Models for Interactive Dynamics of Wild and Sterile Mosquitoes
16.30-16.55	4.30-4.55 PM			<b>Daniel Franco:</b> A New Tool for Studying the Global Stability of Discrete-Time Population Models
17.00-17.25	4.00-4.25 PM			<b>Zhanyuan Hou:</b> Modified Carrying Simplex and Global Dynamics of Competitive Maps
17.30-17.55	5.30-5.55 PM			<b>Senada Kalabušić:</b> Dynamics of a Class Plant-Herbivore Models with Logistic Growth of Plant Biomass
18.30-19.00	<b>Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
19:00-20:00	10.00-11.00 AM	General	Azmy Ackleh	<b>Jim M. Cushing:</b> Difference Equations and Darwinian Dynamics
<b>MS Team: ISDE Meeting (ICDEA 2021)</b>				
<b>Local Time</b>	<b>Chair's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
20.15	1.15 PM (CDT)	General	Saber Elaydi	<b>ISDE Meeting</b>

**July 29 (Thursday)**

<b>Contributed Talks (MS Team: Contributed talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
9.00-9.25	9.00-9.25 AM	Room CT1	Witold Jarczyk	<b>Dino Peran:</b> Linearization of Hyperbolic Logarithmic Transseries and Dulac Germs
9.30-9.55	10.30-10.55 AM			<b>Irina Savu:</b> $\varphi$ -Contractive Parent-Child Infinite IFSs
10.00-10.25	11.00-11.25 AM			<b>Cristina Maria Pacurar:</b> Another Characterization of Hyperbolic Diameter Diminishing to Zero IFSs
10.30-10.55				<b>Sreelatha Chandragiri:</b> Difference equations for Restricted Lattice Path Problems
9.00-9.25	9.00-9.25 AM	Room CT2	Zachary Kudlak	<b>Svetlin Georgiev:</b> Cubic Splines on Time Scales
9.30-9.55	9.30-9.55 AM			<b>Iva Drimalova:</b> Antiprincipal Solutions of Dynamic Symplectic Systems on Time Scales
10.00-10.25	12.30-12.55 PM			<b>Mohsen Khaleghi Moghadam:</b> The Left-Right Nabla Fractional Difference Equation with Boundary-Value Condition
10.30-10.55	10.30-10.55 PM			<b>Zbigniew Lesniak:</b> On Continuity of Fractional Iterates of Brouwer Homeomorphisms
9.00-9.25	12.30-12.55 PM	Room CT3	Mihaly Pituk	<b>Giriraj Methi:</b> A New Method Using Bell Polynomial for Solution of Some Nonlinear Functional Differential Equations
9.30-9.55	1.00-1.25 PM			<b>Sanket Tikare:</b> Nonlinear Time-Varying Delay Dynamic Equations on Time Scales with Impulses
10.00-10.25	1.30-1.55 PM			<b>Naveenkumar Yadav:</b> On Topological Distributional Chaos
10.30-10.55	1.00-1.25 PM			<b>Mehdi Fatehi Nia:</b> Study of Bifurcation and Chaos in Discrete-Time Rayleigh-Duffing Oscillators
9.00-9.25	9.00-9.25 AM	Room CT4	Gian Italo Bischi	<b>Sorin Olaru:</b> Control of Multi-Agent Dynamical Systems: the Coverage Problem
9.30-9.55	9.30-9.55 AM			<b>Roman Šimon Hilscher:</b> On Distribution of Focal Points for Conjoined Bases of Symplectic Difference Systems
10.00-10.25	9.00-9.25 AM			<b>Alberto Pinto:</b> Cicles of Corruption and Democracy
10.30-10.55	9.30-9.55 AM			<b>Jose Martins:</b> Vaccination Against Morbidity Risks: an Evolutionary Dynamics Analysis
12:00-13:00	<b>Lunch Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
13.00-14.00	12.00-1.00 PM	General	Cónall Kelly	<b>John Appleby:</b> Mean Square Characterisation of Linear Stochastic Equations with Memory
14.05-15.05	1.05-2.05 PM	General	Michał Misiurewicz	<b>Nina Snigireva:</b> Beyond Contractive Iterated Function Systems
15.05-15.30	Break			
<b>Special Sessions (MS Team: Special Sessions (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
15.30-15.55	2.30-2.55 PM	Topological and Low-Dimensional Dynamics	Lubomir Snoha	<b>Gabriel Fuhrmann:</b> (Non-)Tameness Among Toeplitz Shifts
16.00-16.25	4.00-4.25 PM			<b>Dominik Kwietniak:</b> $\bar{f}$ -Continuity of Entropy as a Function of Frequency-Typical Orbits
16.30-16.55	4.30-4.55 PM			<b>Antonio Linero Bas:</b> Some Advances in the Study of $\omega$ -Limit Sets of Cournot Maps
17.00-17.25	5.00-5.25 PM			<b>Bill Mance:</b> Borel Complexity of Sets of Normal Numbers via Generic Points in Subshifts with Specification
17.30-17.55	4.30-4.55 PM			<b>Habib Marzougui:</b> Special $\alpha$ -Limit Sets of Monotone Maps on Regular Curves
18.00-18.25	12.00-12.25 PM			<b>Michał Misiurewicz:</b> Flexibility of Entropies for Piecewise Expanding Unimodal Maps
18.30-18.55	6.30-6.55 PM			<b>Peter Raith:</b> Mixing Properties for Expanding Lorenz Maps on the Interval



15.30-15.55	3.30-3.55 PM	Invertible and Noninvertible Maps - Theory and App	Laura Gardini and Iryna Sushko	<b>Xavier Jarque:</b> Topological Properties of the Immediate Basins of Attraction for the Secant Method
16.00-16.25	9.00-9.25 AM			<b>Vlajko L. Kocić:</b> Dynamics of Certain Classes of Nonlinear Discontinuous Discrete Population Models
16.30-16.55	4.30-4.55 PM			<b>Fabio Lamantia:</b> Hybrid Dynamical Systems Through Noninvertible Maps: Some Applications to Economics
17.00-17.25	5.00-5.25 PM			<b>Victor Manosa:</b> On Some Pointwise Periodic Integrable Piecewise Linear Maps
17.30-17.55	8.30-8.55 PM			<b>Tatyana Perevalova:</b> Transitions Between Several Metastable Consumption States in a Stochastic Consumer Network
18.00-18.25	7.00-7.25 PM			<b>Anastasiia Panchuk:</b> Border Collision Bifurcations of Chaotic Attractors in 1D Maps with Multiple Discontinuities
18.30-18.55	6.30-6.55 PM			<b>Fausto Cavalli:</b> A Stylized Macro-Model with Interacting Real, Monetary and Stock Markets
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
19:00-20:00	7.00-8.00 PM	General	Sorin Olaru	<b>Walter Van Assche:</b> Discrete Painlevé Equations and Recurrence Coefficients for Orthogonal Polynomials

**July 30 (Friday)**

<b>Contributed Talks (MS Team: Contributed talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
9.00-9.25	10.00-10.25 AM	Room CT1	Antonio Linero Bas	<b>Inese Bula:</b> About a System of Piecewise Linear Difference Equations with Many Periodic Solutions
9.30-9.55	9.30-9.55 AM			<b>Sanja Kovač:</b> Ostrowski-Grüss Type Inequality with Application to the Weight Twopoint Radau Integral Fomula
10.00-10.25	10.00-10.25 AM			<b>Mihaly Pituk:</b> Linearized Stability in the Context of an Example by Rodrigues and Sola-Morales
10.30-10.55	10.30-10.55 AM			<b>Michal Fečkan:</b> Impulsive Difference Equations
9.00-9.25	12.30-12.55 PM	Room CT2	Rafael Luis	<b>G. Narayanan:</b> Fuzzy Molecular Modeling of Nabla Fractional Difference Complex-Valued Molecular Models of mRNA and Protein in Regulatory Mechanisms
9.30-9.55	11.30-11.55 AM			<b>Mohammad Sajid:</b> Period-doubling in Bifurcation Diagrams from Dynamics of Some Special Kinds of Families of Transcendental Functions
10.00-10.25	10.00-10.25 AM			<b>Daniel Nieves:</b> Periodicity on Max-Type Difference Equations
10.30-10.55	11.30-11.55 AM			<b>Anna Goncharuk:</b> Implicit Linear Difference Equations Over Commutative Rings
9.00-9.25	9.00-9.25 AM	Room CT3	Ziyad AlSharawi	<b>Witold Jarczyk:</b> On Generalized Archimedes-Borchardt Algorithm
9.30-9.55	10.30-10.55 AM			<b>Zeynep Kayar:</b> Novel Delta and Nabla Hardy-Copson Type Inequalities and their Applications to Dynamic Equations
10.00-10.25	11.00-11.25 AM			<b>Billur Kaymakçalan:</b> Diamond-alpha Hardy-Copson Type Dynamic Inequalities and their Extensions
10.30-10.55	11.30-11.55 AM			<b>Nurten Kilic:</b> Oscillation Criteria for Nonlinear Difference Equations with Advanced Type
9.00-9.25	9.00-9.25 AM	Room CT4	Alberto Pinto	<b>Justin Munyakazi:</b> A New Parameter-Uniform Discretization of Semilinear Singularly Perturbed Problems
9.30-9.55	8.30-8.55 AM			<b>Cónall Kelly:</b> A New Splitting Method for the Cox-Ingersoll-Ross Process
10.00-10.25	9.00-9.25 AM			<b>Diana Mendes:</b> Occasionally Binding Constraints in the New Keynesian Model
10.30-10.55	9.30 – 9.55 AM			<b>Ines Ben Rzig:</b> Homogeneous Delayed Systems with Fixed Parameter
<b>Special Sessions (MS Team: Special Sessions (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
8.00-8.25	2.00-2.25 PM	Invertible and Noninvertible Maps - Theory and App	Laura Gardini and Iryna Sushko	<b>Wei Zhou:</b> Global Dynamics Analysis of a Cournot Duopoly Game with R&D spillover and Heterogeneous Products
8.30-8.55	9.30.-9.55 AM			<b>Zhanybai T. Zhusubaliyev:</b> Doubling of a Closed Invariant Curve
9.00-9.25	2.00-2.25 PM			<b>Wirot Tikjha:</b> Some Properties and Bifurcations of Two-dimensional Lotka-Voterra maps
9.30-9.55	10.30-10.55 AM			<b>Iryna Sushko:</b> The Role of Border Collision Bifurcations for Emergence of Business Cycles
10.00-10.25	10.00-10.25 AM			<b>Marina Pireddu:</b> Heterogeneous Agents with Adaptively Adjusted Beliefs About Prices in an Evolutive Muthian Cobweb Model
10.30-10.55	10.30-10.55 AM			<b>Davide Radi:</b> Chaos, Border Collisions and Stylized Empirical Facts in an Asset Pricing Model with Heterogeneous Agents
11.00-11.25	11.00-11.25 PM			<b>Fabio Tramontana:</b> Uncertainty About Fundamental, Pessimistic and Overconfident Traders: a Piecewise-Linear Maps Approach

12:00-13:00	<b>Lunch Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
13.00-14.00	1.00-2.00 PM	General	Laura Gardini	<b>Rene Lozi:</b> Researches on Actual or Industrial Applications of Difference Equations: a Chimeric Task?
14.05-15.05	2.05-3.05 PM	General	Michal Misiurewicz	<b>Lubomir Snoha:</b> Generic Chaos
15.05-15.30	<b>Break</b>			
<b>Special Sessions (MS Team: Special Sessions (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
15.30-15.55	9.30-9.55 PM	Nonlinear Difference Equations and their Applicati	Jianshe Yu, Jia Li and Bo Zheng	<b>Bo Zheng:</b> A Data-Driven Discrete Model for the Implementation of Incompatible and Sterile Insect Technique in Guangzhou
16.00-16.25	10.00-10.25 PM			<b>Zhan Zhou:</b> Discrete Nonlinear Boundary Value Problems with the Mean Curvature Operator
16.30-16.55	10.30-10.55 PM			<b>Zhongcai Zhu:</b> Stability and Periodicity in a Mosquito Population Suppression Model Being Composed of Two Sub-Models
17.00-17.25	10.00-10.25 AM			<b>Eddy Kwessi:</b> Discrete Dynamics of Dynamic Neural Fields
18.00-19.00	<b>Break</b>			
<b>Plenary Talks (MS Team: Plenary talks (ICDEA 2021))</b>				
<b>Local Time</b>	<b>Speaker's Time</b>	<b>Channel</b>	<b>Chair</b>	<b>Speaker and Title</b>
19.00-20.00	10.00-11.00 AM	General	Steve Baigent	<b>Jernej Činč:</b> Dynamical Planar Embeddings of Tent Inverse Limit Spaces
20.00-20.15	<b>Break</b>			
<b>Local Time</b>	<b>Channel</b>	<b>Closing Ceremony (MS Team: Opening and Closing Ceremony (ICDEA 2021))</b>		
20.15	General	<b>Closing Ceremony</b>		