

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 | James A.Yorke: Tiny Models Can Help Us Understand Huge Models |
| 16.05-17.05 | 8.05-9.05 AM | General | Elena Braverman | Gail Wolkowicz: 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 | 11.30-11.55 AM | Room CT1 | Adina Luminita Sasu | Youssef Raffoul: Neutral Volterra Difference Equations of Advanced Type |
| 18.00-18.25 | 1.00-1.25 PM | | | AlehandraRodkina: Stabilization of Multiple Equilibria with Stochastic Prediction-Based Control |
| 18.30-18.55 | 12.30-12.55 PM | | | Roberto De Leo: Backward asymptotics in S-unimodal maps |
| 19.00-19.25 | 7.00-7.25 PM | | | Mariusz Bialecki: 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 | Tom Cuchta: Discrete Meijer G functions |
| 18.00-18.25 | 1.00-1.25 PM | | | Eduardo de Souza Boer: On the Existence and Multiplicity of Solutions for a Class of Choquard Logarithmic Equations |
| 18.30-18.55 | 6.30-6.55 PM | | | Aleksandra Kapešić: Positive Solutions of Thomas-Fermi Type Second-Order Difference Equations with Regularly Varying Coefficients |
| 19.00-19.25 | 7.00-7.25 PM | | | Magdalena Nockowska-Rosiak: The Solvability of Discrete Boundary Value Problems on the Half-Line |
| 17.30-17.55 | 8.00-8.25 PM | Room CT3 | SvetlinGeorgiev | Mohammad Reza Ahmadi Zand: Generalized Nonautonomos G-Dynamical Systems |
| 18.00-18.25 | 12.00-12.25 PM | | | John R. Graef: 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 | | | Mauricio Diaz: Levels of Local Chaos for Special Blocks Families |
| 19.00-19.25 | 6.00-6.25 PM | | | Luis Silva: Milnor Attractors in a Family of Nonautonomous Dynamical SystemsGgenerated by Flat-Topped Tent Maps |
| 17.30-17.55 | 5.30-5.55 PM | Room CT4 | Victor Manosa | Vesna Županović: Fractal Analysis of Planar Nilpotent Singularities and Numerical Applications |
| 18.00-18.25 | 7.00-7.25 PM | | | Fatma Gamze Düzgün: Anisotropic Sobolev Embeddings and the Speed of Propagation for Parabolic Equations |
| 18.30-18.55 | 7.30-7.55 PM | | | Sergey Kryzhevich: Structural Stability for Dynamical Systems on Time Scales |
| 19.00-19.25 | 12.00-12.25 PM | | | Tahmineh Azizi: 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 | Mustafa Kulenović: Global Dynamics Results for a Class of Planar Cooperative Maps | |
| 20.30-20.55 | 7.30-8.00 PM | | | Steve Baigent: An Introduction to the Carrying Simplex of Competitive Population Models | |
| 21.00-21.25 | 3.00-3.25 PM | | | Yevgeniy Kostrov: Preliminary Results on a Rational Equation with Quadratic Term | |
| 21.30-21.55 | 3.30-3.55 PM | | | Elliott Bertrand: Dynamic Scenarios for Some Second-Order Monotone Difference Equations | |
| 22.00-22.25 | 3.00-3.25 PM | | | E Cabral Balreira: 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 | Rafael Luis: Linear Stability Conditions for a First Order-Dimensional Mapping | |
| 20.30-20.55 | 2.30-2.55 PM | | | Stacey Smith?: Using Non-Smooth Models to Determine Thresholds for Microbial Pest Management | |
| 21.00-21.25 | 3.00-3.25 PM | | | Sabrina Streipert: An Alternative Delayed Population Growth Difference Equation Model | |
| 21.30-21.55 | 12.30-12.55 PM | | | Horst R. Thieme: Population Growth Factor Versus Basic Reproduction Number in Discrete-Time Structured Two-Sex Population Models | |
| 22.00-22.25 | 1.00-1.25 PM | | | Yun Kang: 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 | Yacine Halim: Qualitative study of a p -Dimensional System of Difference Equations |
| 9.30-9.55 | 8.30-8.55 AM | | | Asma Allam: Dynamical Behavior of a p -Dimensional System of Nonlinear Difference Equations |
| 10.00-10.25 | 9.00-9.25 AM | | | Amira Khelifa: On the Solution of a p -Dimensional System of Difference Equations via Fibonacci Numbers |
| 10.30-10.55 | 10.30-10.55 AM | | | Jan Jekl: Critical Linear Difference Equations |
| 11.00-11.25 | 12.00-12.25 PM | | | Armen Bagdasaryan: 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 | Davor Dragičević: Linearization and Holder Continuity for Nonautonomous Systems |
| 9.30-9.55 | 10.30-10.55 AM | | | Adina Luminita Sasu: Admissibility Criteria for Exponential Dichotomy of Discrete Nonautonomous Systems and Applications |
| 10.00-10.25 | 10.00-10.25 AM | | | Lokesh Singh: A Shadowing Type Result for the Difference Equations |
| 10.30-10.55 | 9.30-9.55 AM | | | Cesar Silva: Admissibility and μ -Dichotomies for Discrete Dynamics |
| 11.00-11.25 | 10.00-10.25 AM | | | Diana Mendes: Occasionally Binding Constraints in the New Keynesian Model |
| 9.00-9.25 | 4.00-4.25 PM | Room CT3 | Roman ŠimonHilscher | Linyu Peng: The Modified Formal Variational Structure and Variational Integrator |
| 9.30-9.55 | 9.30-9.55 AM | | | Emma D'Aniello: Linear Dynamics on L^p Spaces (Part I) |
| 10.00-10.25 | 10.00-10.25 AM | | | Martina Maiuriello: Linear Dynamics on L^p Spaces (Part II) |
| 10.30-10.55 | 10.30-10.55 AM | | | Dušan Djordjević: 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 | | | Katarina Djordjević: q -Regularly Varying Solutions of the Half-Linear q -Difference Equation |
| 9.00-9.25 | 9.00-9.25 AM | Room CT4 | Samra Moranjkić | Andrea Rožnjik: Comparison of Tests for Oscillations in Delay/Advanced Difference Equations with Continuous Time |
| 9.30-9.55 | 5.30-5.55 PM | | | Christopher Tisdell: The Roles that Shooting Methods Can Play in the Theory of Discrete Boundary Value Problems |
| 10.00-10.25 | 6.00-6.25 PM | | | Charles Stinson: 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 | | | Saleh Almuthaybiri: Existence and Uniqueness of Solutions to Discrete, Third-order Three-point Boundary Value Problems |
| 11.00-11.25 | 12.00-12.25 PM | | | Ulviye Demirbilek: 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 | Peng Chen: Periodic Motion for FPU Lattice Dynamical Systems with the Strongly Indefinite Case |
| 8.30-8.55 | 2.30-2.55 PM | | | Zhiming Guo: Traveling Wavefronts of a Delayed Temporally Discrete Reaction-Diffusion Equation |
| 9.00-9.25 | 3.00-3.25 PM | | | Linchao Hu: Mosquito Control Based on Pesticides and <i>Wolbachia</i> |
| 9.30-9.55 | 3.30-3.55 PM | | | Feng Jiao: Approximating Gene Transcription Dynamics Using Steady-State Formulas |

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| 10.00-10.25 | Break | | | |
| 10.30-10.55 | 4.30-4.55 PM | Nonlinear Difference Equations and their Applicati | Jianshe Yu, Jia Li and Bo Zheng | Genghong Lin: Ground State Solutions of Discrete Asymptotically Autonomous Schrodinger Equations with Saturable Nonlinearities |
| 11.00-11.25 | 5.00-5.25 PM | | | Yuhua Long: Impacts of Dispersal on the Dynamics of a Delayed Two-Patch Discrete SIR Disease Model |
| 11.30-11.55 | 11.30-11.55 AM | | | Juan Segura: Degenerate Period Adding Bifurcation Structure of a Family of Piecewise Linear Maps |
| 12:00-13:00 | Lunch Break | | | |
| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 13.00-14.00 | 7.00-8.00 PM | General | Zhiming Guo | Weinian Zhang: Invariant Manifolds with/without Hyperbolicity |
| 14.05-15.05 | 2.05-3.05 PM | General | Armengol Gasull | Francisco Balibrea: Homoclinic Trajectories in Dynamical Systems of Low Dimension |
| 15.05-15.30 | Break | | | |
| Special Sessions (MS Team: Special Sessions (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 15.30-15.55 | 3.30-3.55 PM | Global Dynamics of Monotone Discrete Dynamical Sys | Mustafa Kulenović | Naida Mujic: Stability Analysis of a Certain Second Order Rational Difference Equation |
| 16.00-16.25 | 5.00-5.25 PM | | | Erkan Tasdemir: Global Behavior of Certain Higher Order Difference Equation |
| 16.30-16.55 | 5.30-5.55 PM | | | Arzu Bilgin: Two Dimensional Continuous Lotka-Volterra Systems with Difference Equations |
| 17.00-17.25 | 6.00-6.25 PM | | | Mansur Saburov: 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 | Elena Braverman: Global Attractivity of Compartment Models and Neural Networks with a Distributed Delay |
| 16.00-16.25 | 9.00-9.25 AM | | | Azmy Ackleh: Stability Results for Discrete-Time Predator-Prey Models |
| 16.30-16.55 | 9.30-9.55 AM | | | Amy Veprauskas: When Can Evolution Destabilize System Dynamics?: A Case Study for a Predator-Prey Model |
| 17.00-17.25 | 4.00-4.25 PM | | | Steve Baigent: Global Stability of Population Models |
| 17.30-17.55 | 11.30-11.55 AM | | | Abdul-Aziz Yakubu: Strong Allee Effect and Basins of Attraction in Discrete-Time Infectious Disease Models |
| 18.00-19.00 | Break | | | |
| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 19:00-20:00 | 12.00-1.00 PM | General | Jim M. Cushing | Saber Elaydi: 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 | Valery Gaiko: Bifurcations and Applications of Multi-Parameter Continuous and Discrete Dynamical Systems |
| 9.30-9.55 | 10.30-10.55 AM | | | Sinan Kapcak: Some Tools for Stability and Bifurcation for Discrete Dynamical Systems |
| 10.00-10.25 | 10.00-10.25 AM | | | Džana Drino: Period-Doubling and Neimark-Sacker Bifurcations of a Beddington Host-Parasitoid Model with a Host Refuge Effect |
| 10.30-10.55 | 10.30-10.55 AM | | | Emin Bešo: Stability of a Certain Class of a Host-Parasitoid Models with a Spatial Refuge Effect |
| 9.00-9.25 | 9.00-9.25 AM | Room CT2 | Fabio Tramontana | Michal Beldziński: Nash-Type Equilibria for Discretizations of Nonlinear Dirichlet Boundary Value Problems |
| 9.30-9.55 | 8.30-8.55 AM | | | Vivaldo Mendes: Learning to Play Nash Equilibrium in Chaotic Dynamics |
| 10.00-10.25 | 10.00-10.25 AM | | | Marek Galewski: Critical point theorems in annular domains with applications to nonlinear equations |
| 10.30-10.55 | 10.30-10.55 AM | | | Domagoj Vlah: 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 | Filip Pietrusiak: On the Solvability of the Discrete Δ -Laplacian Problems on Simple, Connected, Undirected, Weighted and Finite Graphs |
| 9.30-9.55 | 9.30-9.55 AM | | | Vuk Vujović: Dynamical Behavior of the Stochastic Hepatitis C model |
| 10.00-10.25 | 9.00-9.25 AM | | | Issam El Hamdi: Robust Stability of Stochastic Dynamical Systems With Varying Delays |
| 10.30-10.55 | 9.30-9.55 AM | | | Fandi Sun: Strong Convergence of Adaptive Milstein Methods for SDEs |
| 9.00-9.25 | 8.00-8.25 AM | Room CT4 | Michal Fečkan | Rajae Ben Taher: Solving the Linear Difference Equation with Periodic Coefficients via Linearly Recurring Sequences |
| 9.30-9.55 | 1.00-1.25 PM | | | Jagan Mohan Jonnalagadda: Stability and Asymptotic Behaviour of a Linear Nabla Fractional Difference Equation |
| 10.00-10.25 | 1.30-1.55 PM | | | Gokula Nanda Chhatra: Oscillation of Second Order Impulsive Neutral Difference Equations of Non-Canonical Type |
| 10.30-10.55 | 2.00-2.25 PM | | | Jyoti Kori: 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 | Viktor Avrutin: Period 2 Implies Chaos: the Hidden Bridge Between Continuous and Discontinuous Worlds |
| 8.30-8.55 | 8.30-8.55 AM | | | Gian Italo Bischi: Non Connected Basins in Club Goods Adaptive Binary Games |
| 9.00-9.25 | 9.00-9.25 AM | | | Nicolo Pecora: Dynamics of a New Keynesian Model with Heterogeneous Expectations: the Role of Monetary Policy |
| 9.30-9.55 | 9.30-9.55 AM | | | Lorenzo Cerboni Baiardi: Bubbling, Riddling, Blowout and Critical Curves |
| 10.00-10.25 | 10.00-10.25 AM | | | Antonio Garijo: Dynamics of the Secant Map Near a Critical 3-cycle |
| 10.30-10.55 | 10.30-10.55 AM | | | Armengol Gasull: Periodic Solutions of Perturbed Globally Periodic Discrete Dynamical Systems |
| 11.00-11.25 | 11.00-11.25 AM | | | Francesca Grasseti: Nonlinear Dynamics in Real Economy and Financial Markets. The role of Dividend Policies in Fluctuations |

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|--|-----------------------|---|---|--|
| 10.00-10.25 | 4.00-4.25 PM | Nonlinear Difference Equations and their Applicati | Jianshe Yu, Jia Li and Bo Zheng | Yantao Shi: 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 | | | Rong Yan: 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 | | | Huafeng Xiao: Periodic Solutions with Prescribed Minimal Period to Hamiltonian Systems |
| 11.30-11.55 | 5.30-5.55 PM | | | Chu-fen Wu: Propagation Dynamics in a Heterogeneous Reaction-Diffusion System Under a Shifting Environment |
| 12:00-13:00 | Lunch Break | | | |
| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 13.00-14.00 | 7.00-8.00 PM | General | Bo Zheng | Jianshe Yu: 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 | Peter E. Kloeden: Lattice Difference Equations |
| 15.05-15.30 | Break | | | |
| Special Sessions (MS Team: Special Sessions (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 15.30-15.55 | 10.30-10.55 AM | Topological and Low-Dimensional Dynamics | Lubomir Snoha | Ana Anušić: Local Structure of Inverse Limit Spaces |
| 16.00-16.25 | 4.00-4.25 PM | | | Andrzej Bis: Metric Versus Topological Receptive Entropy of Semigroup Actions |
| 16.30-16.55 | 4.30-4.55 PM | | | Jose S. Canovas: The Dynamics of a Four-Step Feedback Procedure to Control Chaos |
| 17.00-17.25 | 5.00-5.25 PM | | | Jernej Činč: Genericity of Pseudo-Arc in Various Classes of Interval Inverse Limits |
| 17.30-17.55 | 6.30-6.55 PM | | | Lyudmila Efremova: Periodic Points of Geometrically Integrable Maps in the Plane |
| 18.00-18.25 | 6.00-6.25 PM | | | Francisco Balibrea: On Shifts and Distributional Chaos |
| 18.30-18.55 | 6.30-6.55 PM | | | Bill Mance: Borel Complexity of Sets of Normal Numbers via Generic Points in Subshifts with Specification |
| 15.30-15.55 | 5.30-5.55 PM | Population Dynamics and Related Topics | Jim M. Cushing and Gail Wolkowicz | Ziyad AlSharawi: The Role of Vigilance on a Discrete-Time Predator-Prey Model |
| 16.00-16.25 | 9.00-9.25 AM | | | Jia Li: Discrete-Time Models for Interactive Dynamics of Wild and Sterile Mosquitoes |
| 16.30-16.55 | 4.30-4.55 PM | | | Daniel Franco: A New Tool for Studying the Global Stability of Discrete-Time Population Models |
| 17.00-17.25 | 4.00-4.25 PM | | | Zhanyuan Hou: Modified Carrying Simplex and Global Dynamics of Competitive Maps |
| 17.30-17.55 | 5.30-5.55 PM | | | Senada Kalabušić: Dynamics of a Class Plant-Herbivore Models with Logistic Growth of Plant Biomass |
| 18.30-19.00 | Break | | | |
| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 19:00-20:00 | 10.00-11.00 AM | General | Azmy Ackleh | Jim M. Cushing: Difference Equations and Darwinian Dynamics |
| MS Team: ISDE Meeting (ICDEA 2021) | | | | |
| Local Time | Chair's Time | Channel | Chair | Speaker and Title |
| 20.15 | 1.15 PM (CDT) | General | Saber Elaydi | ISDE Meeting |

July 29 (Thursday)

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

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

July 30 (Friday)

| 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 | Antonio Linero Bas | Inese Bula: About a System of Piecewise Linear Difference Equations with Many Periodic Solutions |
| 9.30-9.55 | 9.30-9.55 AM | | | Sanja Kovač: Ostrowski-Grüss Type Inequality with Application to the Weight TwopointRadau Integral Fomula |
| 10.00-10.25 | 10.00-10.25 AM | | | Mihaly Pituk: Linearized Stability in the Context of an Example by Rodrigues and Sola-Morales |
| 10.30-10.55 | 10.30-10.55 AM | | | Michal Fečkan: Impulsive Difference Equations |
| 9.00-9.25 | 12.30-12.55 PM | Room CT2 | Rafael Luis | G. Narayanan: 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 | | | Mohammad Sajid: 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 | | | Daniel Nieves: Periodicity on Max-Type Difference Equations |
| 10.30-10.55 | 11.30-11.55 AM | | | Anna Goncharuk: Implicit Linear Difference Equations Over Commutative Rings |
| 9.00-9.25 | 9.00-9.25 AM | Room CT3 | Ziyad AlSharawi | Witold Jarczyk: On Generalized Archimedes-Borchardt Algorithm |
| 9.30-9.55 | 10.30-10.55 AM | | | Zeynep Kayar: Novel Delta and Nabla Hardy-Copson Type Inequalities and their Applications to Dynamic Equations |
| 10.00-10.25 | 11.00-11.25 AM | | | Billur Kaymakçalan: Diamond-alpha Hardy-Copson Type Dynamic Inequalities and their Extensions |
| 10.30-10.55 | 11.30-11.55 AM | | | Nurten Kilic: Oscillation Criteria for Nonlinear Difference Equations with Advanced Type |
| 9.00-9.25 | 9.00-9.25 AM | Room CT4 | Zenan Šabanac | Justin Munyakazi: A New Parameter-Uniform Discretization of Semilinear Singularly Perturbed Problems |
| 9.30-9.55 | 8.30-8.55 AM | | | Cónall Kelly: A New Splitting Method for the Cox-Ingersoll-Ross Process |
| 10.00-10.25 | 9.00-9.25 AM | | | Ines Ben Rzig: Homogeneous Delayed Systems with Fixed Parameter |
| Special Sessions (MS Team: Special Sessions (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 8.00-8.25 | 2.00-2.25 PM | Invertible and Noninvertible Maps - Theory and App | Laura Gardini and Iryna Sushko | Wei Zhou: Global Dynamics Analysis of a Cournot Duopoly Game with R&D spillover and Heterogeneous Products |
| 8.30-8.55 | 9.30-9.55 AM | | | Zhanybai T. Zhusubaliyev: Doubling of a Closed Invariant Curve |
| 9.00-9.25 | 2.00-2.25 PM | | | Wirot Tikjha: Some Properties and Bifurcations of Two-dimensional Lotka-Voterra maps |
| 9.30-9.55 | 10.30-10.55 AM | | | Iryna Sushko: The Role of Border Collision Bifurcations for Emergence of Business Cycles |
| 10.00-10.25 | 10.00-10.25 AM | | | Marina Pireddu: Heterogeneous Agents with Adaptively Adjusted Beliefs About Prices in an Evolutive Muthian Cobweb Model |
| 10.30-10.55 | 10.30-10.55 AM | | | Davide Radi: Chaos, Border Collisions and Stylized Empirical Facts in an Asset Pricing Model with Heterogeneous Agents |
| 11.00-11.25 | 11.00-11.25 PM | | | Fabio Tramontana: Uncertainty About Fundamental, Pessimistic and Overconfident Traders: a Piecewise-Linear Maps Approach |
| 12:00-13:00 | Lunch Break | | | |

| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
|---|----------------|---|------------------------------------|--|
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 13.00-14.00 | 1.00-2.00 PM | General | Laura Gardini | Rene Lozi: Researches on Actual or Industrial Applications of Difference Equations: a Chimeric Task? |
| 14.05-15.05 | 2.05-3.05 PM | General | Michal Misiurewicz | Lubomir Snoha: Generic Chaos |
| 15.05-15.30 | Break | | | |
| Special Sessions (MS Team: Special Sessions (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 15.30-15.55 | 9.30-9.55 PM | Nonlinear Difference Equations and their Applicati | Jianshe Yu, Jia Li and Bo Zheng | Bo Zheng: 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 | | | Zhan Zhou: Discrete Nonlinear Boundary Value Problems with the Mean Curvature Operator |
| 16.30-16.55 | 10.30-10.55 PM | | | Zhongcai Zhu: Stability and Periodicity in a Mosquito Population Suppression Model Being Composed of Two Sub-Models |
| 17.00-17.25 | 10.00-10.25 AM | | | Eddy Kwessi: Discrete Dynamics of Dynamic Neural Fields |
| 18.00-19.00 | Break | | | |
| Plenary Talks (MS Team: Plenary talks (ICDEA 2021)) | | | | |
| Local Time | Speaker's Time | Channel | Chair | Speaker and Title |
| 19.00-20.00 | 7.00-8.00 PM | General | Steve Baigent | Jernej Činč: Dynamical Planar Embeddings of Tent Inverse Limit Spaces |
| 20.00-20.15 | Break | | | |
| Local Time | Channel | Closing Ceremony (MS Team: Opening and Closing Ceremony (ICDEA 2021)) | | |
| 20.15 | General | Closing Ceremony | | |