

(All the talks will be held in the Congress Center)
Monday, July 23, 2007

Speakers	Main Talks	
BALADI	Linear Response in the Absence of Structural Stability	
BALIBREA	Origin, Motivation and Results on two Scalar Non-Linear Difference Equations: Thue-Morse and Fibonacci	
NUSSBAUM	Dynamics of Iterated Nonlinear Maps of Finite Dimensional Cones	
<b>ROBNIK</b> Exact Analysis of the Adiabatic Invariants in Time-dependent Harm Oscillator		
SHARKOVSKY	<b>DVSKY</b> Difference Equations with Continuous Time: Theory and Applications	

Speakers	Contributed Talks	
ABDERRAMÁN	Chain Sequences and Location of Continuous Spectrum in Self-Adjoint Difference Operators	
AHMADI	I Predictor-Corrector Method for Fuzzy Initial Value Problem	
ALEKSENKO	Newton's Problem of Minimal Resistance	
ALEKSENKO	in the Class of Solids of Revolution	
BAPTISTA, A.	Difference Equations on Matrix Algebras	
BRAVERMAN	On Cushing Henson Conjecture and Attenuant Cycles	
BRUDER	Jacobi Polynomials $(\alpha = \beta = -1)$ , their Sobolev Orthogonality, and Self-Adjoint Operators	
CABADA	Existence of Stable and Unstable Periodic Solutions of Non Autonomous First Order Difference Equations	
ELYSEEVA	The Comparative Index and Riccati Difference Equations	
GONTAR	Creative Properties of the 2D Lattice Distributed Interconnected Chaotic Oscillators: Colored Ornaments Generated by Discrete Logistic Equation	
GRÁCIO	Graphs, Symbolic Dynamics and Synchronization of Networks	
HILSCHER	Time Scale Embedding Theorem and Coercivity of Quadratic Functionals	
KENT*	A Cardiac Reentry Loop Model with Thresholds	
KIPNIS	Explicit Stability Conditions for Difference Equations	
KOCAN	On the Centre and the Set of $\omega$ -Limit Points of Dynamical Systems on Dendrites	
LAITOCHOVÁ	Linear Functional Equations in the Space of Strictly Monotonic Functions	
LAKSHTANOV	Scattering by Obstacles and Wave Problem of Minimal Resistance	
MÁLEK	On Variants of Distributional Chaos in One-dimensional Spaces	
MEDINA	Absolute Stability of Nonlinear Delay Difference Systems	
PETERSON	Oscillation Criteria for a Forced Second Order Nonlinear Dynamic Equation	
PINELAS	Oscillatory Mixed Differential Difference Equations	
RAITH Stability of Unimodal Maps under Small Perturbations		
RASMUSSEN	Bifurcation Theory for Nonautonomous Difference Equations	
REINFELDS	Conjugacy of Difference Equations in the Neighbourhood of Invariant Manifold	
RUFFING	Oscillation Behavior of Some Schrödinger Difference Equations	
SCHINAS On a k order System of Lyness Type Difference Equations		
ŠTEFÁNKOVÁ	Distributional (and other) Chaos Almost Everywhere	
PAPASCHINOPOULOS	Boundedness, Periodicity and Stability of the Difference Equation $x_{n+1} = A_n + \left(\frac{x_{n-1}}{x_n}\right)^p$	
ZHU	(2+1)-Dimensional Nonisospectral Lattice Hierarchy and Generalized Discrete Painlevé Hierarchy	

# Timetable - Monday, July 23, 2007

8:30 Opening Session

	Chair
	Ferreira
	Anf.1
9:00-9:50	Sharkovsky

10:00-10:20 Coffee Break

	Chair	Chair
	Misiurewicz	Sacker
	Anf.1	Room 1
10:20-11:20	Baladi	Balibrea
11:20-12:20	Nussbaum	Robnik

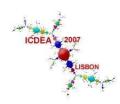
12:20-14:00 Lunch

	Chair	Chair	Chair	Chair
	Nishimura	Dannan	Severino	Elyseeva
	Room 1	Room 2	Room 3	Room 4
14:00-14:25	Peterson	Zhu	Raith	Braverman
14:25-14:50	Schinas	Papaschinopoulos	Kocan	Gontar
14:50-15:15	Medina	Ruffing	Málek	Rasmussen
15:15-15:40	Kipnis	Bruder	Stefánková	(40 minutes)

15:40-16:10 Coffee Break

	Chair	Chair	Chair	Chair
	Hilger	Hamaya	Došlý	Berezansky
	Room 1	Room 2	Room 3	Room 4
16:10-16:35	Pinelas	Reinfelds	Ahmadi	Grácio
16:35-17:00	Elyseeva	Laitochová	Baptista	Aleksenko
17:00-17:25	Cabada	Hilscher	Abderramán	Lakshtanov

18:00 Cocktail Party
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(All the talks will be held in the Congress Center)
Tuesday, July 24, 2007

Speakers	Main Talks	
ALSEDÀ	Attractors for Unimodal Quasiperiodically Forced Maps	
LADAS	Rational Difference Equations	
MALLET-	Singular State-dependent Delay Equations: Asymptotics and Stability	
PARET	Singular State-dependent Delay Equations. Asymptotics and Stability	
MISIUREWICZ	Dynamics of Nash maps for $2 \times 2$ games	
NISHIMURA	Higher Order Difference Equations in Economic Theory	

Speakers	Contributed Talks	
Akın*	Oscillatory Behaviour Of Higher Order Neutral Type Nonlinear Force	
Akiii* Differential Equation With Oscillation Coefficients		
BAPTISTA, B.	Topological Invariants for Lozi Maps	
BEREZANSKY	Nonoscillation and Stability for Linear Difference Equations with Several	
	Delays	
BERNHARDT	Zero-Entropy Vertex Maps on Graphs	
BOHNER, M.	INER, M. Asymptotic Integration of Dynamic Equations	
CALVO-	The Limit of Linear Elliptic Problems with Variable Operators and	
JURADO	Varying Boundary Conditions	
CANECO	Chaotic Synchronization of Unimodal and Bimodal Maps	
CORREIA	On the Iteration of Smooth Maps	
COUTINHO	Planar Fronts in Bistable Coupled Map Lattices	
GONÇALVES	Universal BHP Distribution and Nonlinear Prediction in Complex	
	Systems using the Ruelle-Takens Embedding	
HEREDERO	Multiscale Expansion of the Discrete KdV Equation	
HILGER	Category of Time Dependent Ladders	
KELLER	Ordinal Pattern Distributions in Dynamical Systems	
KOSTROV	On Riccati Difference Equations with Complex Coefficients	
LIN	Discrete Mechanics and Optimal Control of Molecular Dynamics	
MENDES, V.	Chaotic Interest Rates Rules and Stabilization	
PETROPOULOU	A "Discretization" Technique for the Solution of ODEs	
POP	POP Dynamic Contact Problems in Linear Viscoelasticity	
RACHIDI	Dynamical Solution from the Confluence of Fibonacci-Horner Methods	
KACIIIDI	and Computation of the Matrix Exponential	
SCHMEIDEL Maximal and Minimal Solutions of Neutral Equations		
SCHULTZ Riccati Difference Equations with Real Period-2 Coefficients		
STAVROULAKIS Oscillations of Linear Difference Equations with Variable Delay		
STEVÍC On Lengths of Semicycles of Solutions of Difference Equations		
SUHRER	Numerical Results for Some Schrödinger Difference Equations	
TZIRTZILAKIS	On the Analytic Structure of the Complex Blasius Problem	
UVAROVA	Discrete Non-linear Model of Information Evolution	
VOULOV	On Some Nonlinear Difference Equations with Periodic Coefficients	
ZERIZER	Moved to Friday	

# **Timetable -** Tuesday, July 24, 20077

	Chair
	Sharkovsky
	Anf.1
9:00-9:50	Misiurewicz

10:00-10:20	Coffee Break
10:00-10:20	Coffee Break

	Chair	Chair
	Peterson	Baladi
	Anf.1	Room 1
10:20-11:20	Ladas	Nishimura
11:20-12:20	Mallet-Paret	Alsedà

12:20-14:00	Lunch	Meeting of the Board
12.20 1 1.00	Editell	wiccing of the i

	Chair	Chair	Chair	Chair
	Gyori	Cabada	Gontar	ABohner
	Room 1	Room 2	Room 3	Room 4
14:00-14:25	Moved to	Hilger	Coutinho	Keller
14.00-14.23	Friday	niiger	Coutililo	Keller
14:25-14:50	Voulov	Calvo-Jurado	Bernhardt	Lin
14:50-15:15	Kostrov	Baptista	Stavroulakis	Uvarova
15:15-15:40	Suhrer	Gonçalves	Correia	Pop

15:40-16:10 Coffee Break	
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	Chair	Chair	Chair	Chair
	López	Došlá	Rasmussen	Ruffing
	Room 1	Room 2	Room 3	Room 4
16:10-16:35	Schultz	Hernández	Bohner, M.	Akın
16:35-17:00	Schmeidel	Petropoulou	Berezansky	Mendes, V.
16:35-17:00 17:00-17:25	Schmeidel Rachidi	Petropoulou Tzirtzilakis	Berezansky Stevíc	Mendes, V. Caneco



(All the talks will be held in the Congress Center) Wednesday, July 25, 2007

Speakers	Main Talks
SELL	Longtime Dynamics of Eulerian Time Discretizations for Differential Delay Equations with Feedback Properties
SNOHA	Minimal Sets in Discrete Dynamics
VANDERBAUWHEDE	Lyapunov-Schmidt Revisited

# **Timetable -** Wednesday, July 25, 2007

	Chair
	Sui Sun Cheng
	Anf.1
9:00-9:50	Sell

10:00-10:20	Coffee Break
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	Chair	Chair
	Balibreas	Kloedan
	Anf.1	Room 1
10:20-11:20	Vanderbauwhede	Snoha
	Chairs	
	Ladas, Misiurewicz, Alsedà	
11:20-12:20	<b>Open Problems Session</b>	

12:20-13:20	Lunch
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13:30	Departure of bus to excursion



(No talks this afternoon) Wednesday, July 25, 2007

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(All the talks will be held in the Congress Center)
Thursday, July 26, 2007

Speakers	ers Main Talks	
CHENG	Calculus for Sequences Arising from Seeking Analytic Solutions of	
	Functional Equations	
CUSHING Difference Equation Models of Biological Semelparity		
DEVANEY	Sierpinski Galore	
KLOEDEN  Semi-Hyperbolicity and Bi-Shadowing in DifferenceEquations wit Lipschitz Mappings		
PINTO Hyperbolic Dynamics		

Speakers	Contributed Talks		
AKIN-BOHNER	A Generalized Upper and Lower Method for Singular Boundary Value Problems for Quasilinear Dynamic Equations		
ALVES	Computing the Periods of a Periodic Nonautonomous Difference Equation		
<b>APPLEBY</b> Numerical Detection of Finite-Time Explosions in Stochastic Different Equations			
DANNAN	Nonautonomous Beverton-Holt Equations and the Cushing-Henson Conjectures		
DIBLÍK	Stability of the Zero Solution of Difference Systems with Quadratic Right-hand Sides in the Critical Case		
DOŠLÁ	An Extension of the Casoratian for Half-Linear Difference Equations		
DOŠLÝ	Linearized Riccati Technique and (Non) Oscillation Criteria for Half-Linear Difference Equations		
<b>EDMUNDS</b>	A Discrete Competition Model with Periodically Oscillating Habitat Size		
FUJIMOTO	Stability through Migration		
KADELL	Difference Equations for Euler-Zagier Functions		
GOMES	Unfulfilled Rational Expectations and the Stability of Monetary Policy		
KUNDRÁT	On Asymptotics of Discretized Delay Differential Equation		
LUÍS, R.	A Dynamical System for a Long Term Economical Model		
MENDES, D.	Dynamics and Control in an Implicitly Defined Matching Labor Market Model		
AL-HASSAN	A Harmonic Relation Between Second-Order Linear Difference Equations and Tridiagonal Matrices with Applications		
PITUK	Monotone Solutions of a Nonlinear Difference Equation with Continuous Time		
QUINN	Boundedness and Periodic Convergence in Rational Difference Equations		
RĚHÁK	Regularly Varying Sequences and Second Order Difference Equations		
RAKOWSKI	Dynamics of Timoshenko beams by Difference Equations using NURBS		
REN	Positive Periodic Solutions for Neutral Difference Equations with Variable Delay		
RODKINA	Non-exponential Stability and Decay Rates in Nonlinear Stochastic Difference Equation with Unbounded Noises		
KELLY	Dynamical Consistency in Discrete and Continuous Equations with Finite-Time Explosions s		
RODRÍGUEZ- LÓPEZ	Some Considerations on Fuzzy Dynamical Systems		
SACKER	Population Models with Allee Effect		
SEVERINO	Difference Equations and Nonlinear Boundary Problems for Hyperbolic Systems		
SILVA, L.	Genus and Braid Index Associated to Sequences of Renormalizable Lorenz Maps		
ÜNAL	Lyapunov-type Inequalities for Nonlinear Systems on Time Scales		

## Timetable - Thursday, July 26, 2007

	Chair <i>Mallet-Paret</i>
	Anf.1
9:00-9:50	Pinto

	Chair	Chair
	Vanderbauwhede	Smith
	Anf.1	Room 1
10:20-11:20	Devaney	Kloeden
11:20-12:20	Cushing	Cheng

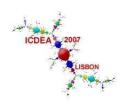
#### 12:20-14:00 Lunch

	Chair	Chair	Chair	Chair
	Pop	Raith	Schmeidel	Alsedà
	Room 1	Room 2	Room 3	Room 4
14:00-14:25	Rodkina	Kundrát	Kadell	Luís
14:25-14:50	Ren	Wang	Silva	Gomes
14:50-15:15	<b>R</b> *ehák	Severino	Kelly.	Mendes, D.
15:15-15:40	Rakowski	Rodríguez-López	Alves	Dannan

### 15:40-16:10 Coffee Break

	Chair	Chair	Chair	Chair
	Rodkina	Medina	Stevic	Nussbaum
	Room 1	Room 2	Room 3	Room 4
16:10-16:35	Quinn	Ünal	Došlá	Sacker
16:35-17:00	Pituk	Appleby	Diblík	Fujimoto
17:00-17:25	Al-Hassan	Akin-Bohner	Došlý	Edmunds

19.15	Danartura in nanaramia bug to gogial dinnar
19:13	Departure, in panoramic bus, to social dinner



(All the talks will be held in the Congress Center)
Friday, July 27, 2007

Speakers	Main Talks		
ELAYDI	Center Manifold, Bifurcation and Stability of two-dimensional Systems		
MAWHIN	Boundary Value Problems, Periodic and Bounded Solutions for some Nonlinear Difference Equations		
SMÍTAL	Why it is important to understand the dynamics of triangular maps?		
SMITH	Embedding Systems in Larger Monotone Systems versus Comparison Methods		

Speakers	Contributed Talks		
АОМОТО	q-Hypergeometric Functions and Holonomic q-Difference Equations		
BODINE	Asymptotic Integration under Weak Dichotomies		
CAMOUZIS	Periodically Forced Rational Equations		
CHIRICALOV	Periodic Solution of Matrix Difference Nonlinear Equations with Bilinear Main Part		
CZERWIK	On the Stability of the Functional Equation of Quadratic Functionals		
FELLER	Homoclinic Solutions for 2n <sup>th</sup> Order Self-Adjoint Difference Equations		
FERNANDES	Conductance in Discrete Dynamical Systems		
GIESL	Construction of Lyapunov Functions for Discrete Dynamical Systems using Radial Basis Functions		
ALMEIDA	Golden Tilings of the Real Line		
GYORI	Exponential Representation of the Solutions of Nonlinear Volterra Difference Equations		
HAMAYA	On the Criteria for Irrational Number of Recursive Sequences		
HRIC	Almost Totally Disconnected Minimal Systems		
IWATA	Coexistence of Plant Species - the Analysis of Revised Lottery Model -		
JOHNSON	The Global Properties of a Two-Dimensional Competing Species Model Exhibiting Mixed Competition		
KUPKA	TBA		
LÓPEZ	Global Attractors for Difference Equations Dominated by One- dimensional Maps		
MARTINHO	Interval Maps and Cellular Automata		
MEILER	TBA		
MELO	Numerical Range, Numerical Radii and the Dynamics of a Rational Function		
MIGDA	On a Class of First-Order Nonlinear Difference Equations of Neutral Type		
MIGUEL	Optimal Choice of Delay in Shrimp Population Models		
RODRIGUES, A.	Hopf Bifurcation with SN-Symmetry		
SHUKLIN	Construction of a central diversity for the differential systems with deviating argument		
ZERIZER	Perturbation Method for Linear Difference Equations with Small Parameters		

# **Timetable -** Friday, July 27, 2007

	Chair
	Devaney
	Anf.1
9:00-9:50	Mawhin

### 10:00-10:20 Coffee Break

	Chair Cushing	Chair <i>Ladas</i>
	Anf.1	Room 1
10:20-11:20	Smith	Smítal
11:20-12:20	Elaydi	

### 12:20-14:00 Lunch

	Chair	Chair	Chair	Chair
	Robnik	Sell	Smital	Snoha
	Room 1	Room 2	Room 3	Room 4
14:00-14:25	Aomoto	Gyori	Fernandes	Hric
14:25-14:50	Chiricalov	Iwata	Giesl	Martinho
14:50-15:15	López	Johnson	Almeida	Rodrigues, A.
15:15-15:40	Migda	Miguel	Melo	Camouzis

#### 15:40-16:10 Coffee Break

	Chair	Chair	Chair	Chair
	Mawhin	Pinto	Camouzis	Ünal
	Room 1	Room 2	Room 3	Room 4
16:10-16:35	Kupka	Bodine	Feller	Czerwik
16:35-17:00	Hamaya	Shuklin	Meiler	Zerizer