

## Chaotic Modeling and Simulation International Conference (CHAOS2008)

June 3 - 6, 2008 Chania Crete Greece

<b>Program</b>			
Session / Room	Date / Time	Event	Talk Title / Event
<b>Monday June 2</b>			
<b>MAICh</b>	17.00-20.00		<b>Registration</b>
<b>Tuesday June 3</b>			
<b>MAICh</b>	8.30-10.00		<b>Registration</b>
<b>Aristotle</b>	10.00-10.40	<b>Opening Ceremony</b>	
<b>Aristotle</b>	10.40-11.30	<b>Keynote Session (Chair: D. Sotiropoulos) Julien Clinton Sprott University of Wisconsin, Madison, WI, USA</b>	<u><a href="#">Chaotic Dynamics on Large Networks</a></u>
<b>MAICh</b>	11.30-12.00		<b>Coffee Break</b>
<b>SCS1</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS1</b>	
<b>Room 1</b>	03.06.08: 12.00-13.40	<b>Chair: M. V. Zakrzhevsky</b>	<b>UNUSUAL CHAOTIC AND REGULAR ATTRACTORS</b>
		R. S. Smirnova, M. V. Zakrzhevsky	Unusual Chaotic and Regular Attractors in Linear Driven Oscillators with Nonlinear Positive Damping
		M. V. Zakrzhevsky, V. Yu. Yevstignejev, E. P. Shilvan	Rare Chaotic Attractors and Unknown Multiplicity in the Bilinear and Vibro-Impact Driven Systems. Bifurcation Analysis and Applications
		M. V. Zakrzhevsky, I. T. Schukin, R. S. Smirnova, V. Yu. Yevstignejev	Method of Complete Bifurcation Groups and its Applications for Prediction of Unknown Chaotic and Regular Attractors in Nonlinear Dynamical Systems
		I. T. Schukin, M. V. Zakrzhevsky	Global Analysis of Nonlinear Regular, Transient and Chaotic Dynamics: Universal Software SPRING
<b>Room 2</b>	03.06.08: 12.00-13.40	<b>Chair: V. Lucarinni</b>	<b>DYNAMICAL SYSTEMS I</b>
		Vladimir Korniyak	Computer Aided Symmetry Analysis of Discrete Dynamical Systems
		Omur Umut	Dynamical behaviours of Genesio system
		A. Okninski, B. Radziszewski	Dynamics of impacts with a table moving with piecewise constant velocity
		Jakub M. Gac, Jan J. Zebrowski	Effect of parametric dichotomic Markov noise on the properties of chaotic transitions in dynamical systems

<b>Room 3</b>	03.06.08: 12.00-13.40	<b>Chair: C. H. Skiadas</b>	<b>MATHS/ 1</b>
		Angeliki Pavana, Dimitris Kugiumtzis	Assessment of estimators of information flow and coupling directionality measures
		Bernd Binder	Magic Angle Chaotic Precession
		Farhad Farokhi, Bizhan Farokhi	Synchronization of Two Different Chaotic Systems via Active Control
		Christos H. Skiadas and Charilaos Skiadas	Chaos in Simple Rotation-Translation Models
<b>Room 4</b>	03.06.08: 12.00-13.40	<b>Chair: T. Kapitaniak</b>	<b>FRACTALS/ 1</b>
		C. Secieru, M. Bigerelle, A. Iost	Self similar versus self-affine in fractal fracture
		Blavatska Viktoriya	Self-avoiding random walks on fractals: scaling and multifractality
		C. Secieru, Jean-Marie Nianga, A. Lost	Some remarks concerning the application of the Variation method in the study of fractal curves
		Vassileios Drakopoulos, Polychronis Manousopoulos	One dimensional fractal interpolation: Determination of the vertical scaling factors using convex hulls
<b>Room 5</b>	03.06.08: 12.00-13.40	<b>Chair: H. Adeli</b>	<b>BIOLOGY/ GENETICS/</b>
		Dario M. Domínguez, Mariela Marín	Fractional Differential Equation for the Analysis of Electrophysiological Recordings
		R. Sambasivan	Polychromatic Holographic Deblurring Correlation Filters for High Resolution Image Processing
		Francesco Piazza	Discrete breathers in protein structures: a mechanism for energy storage in enzymes
		A. M. Selvam	Universal spectrum for DNA base C+G concentration variability in Human chromosome Y
<b>MAICh</b>	03.06.08: 13.40-15.00		<b>Lunch</b>
<b>Aristotle</b>	03.06.08: 15.00-15.50	<b>Keynote Session (Chair: M. Christodoulou)</b> <b>Hojjat Adeli</b> The Ohio State University, USA	<b>Chaos in the Brain: Chaos-Wavelet Models for EEG-Based Diagnosis of Neurological Disorders</b>
<b>Aristotle</b>	03.06.08: 15.50-16.40	<b>Keynote Session Chair: T. Bountis)</b> <b>Nail Akhmediev</b> Institute of Advanced Studies, Australian National University, Canberra, AUSTRALIA	<b><u>Chaotic Solitons in Dissipative Systems</u></b>
<b>MAICh</b>	03.06.08: 16.40-17.00		<b>Coffee Break</b>
<b>Aristotle</b>	03.06.08: 17.00-17.40	<b>Keynote Session (Chair: P. Manneville)</b> <b>Sergey V. Prants</b> Pacific Oceanological Institute of the RAS Vladivostok, RUSSIA	<b><u>Chaotic Advection in the Ocean</u></b>

SCS2		SPECIAL AND CONTRIBUTED SESSIONS SCS2	
<b>Room 1</b>	03.06.08: 17.40-19.40	<b>Chair: Tassos Bountis</b>	<b>DYNAMICAL SYSTEMS II</b>
		Tassos Bountis, Charalampos Skokos, Eleni Christodoulidi	Detecting Chaos, Determining the Dimensions of Tori and Predicting Slow Diffusion in Nonlinear Hamiltonian Lattices
		Mahmoud Mohammed El-Borai	Exact solution for nonlinear fractional parabolic partial differential equations
		Stoycho Panchev	Minimal Nonlinear Extension of the Lorenz Chaotic System
		Tatiana Spassova	Parametric dependence of the behaviour of a simple nonlinear dynamical system
		Esa Ranta, Andreas Lindén, Mike Fowler, Lasse Ruokolainen and Veijo Kaitala	Interactions among species in a community tame chaotic population dynamics in natural populations
<b>Room 2</b>	03.06.08: 17.40-19.40	<b>Chair: M. Umeki</b>	<b>BIFURCATION</b>
		Johanne Hizanidis	Effect of noise and delay near a global bifurcation in superlattices
		S. V. Astakhov, T.E. Vadivasova, V.S. Anishchenko	Transition to Chaos through the Spatial Period Doubling Bifurcations in a Continuous Model of Active Medium
		Majdi M. Alomari, Benedykt S. Rodanski	The Effects of Machine Components on Bifurcation and Chaos as Applied to Multimachine System
		I. Sibgatullin, S. Gertsenstein	Bifurcations and chaotic regimes of double-diffusive convection in plain layer
		Makoto Umeki	Double Periodicity and Frequency-Locking in the Langford Equation
<b>Room 3</b>	03.06.08: 17.40-19.40	<b>Chair: C. Raeth</b>	<b>MATHS/2</b>
		Ioannis G. Tigkas and Nikolaos Pallikaropoulos	Parametric Rolling Behaviour of a Containership
		Christoph Raeth	Surrogates with random Fourier phases
		Gaetana Gambino, Maria Carmela Lombardo, Marco Sammartino	A seven mode truncation of the Kolmogorov Flow with drag: analysis and control
		Alexandros Alexakis	Energy dissipation in two dimensional flows
		Ali Moghani	New Data Sets for Computational Fuzzy Color Naming
<b>Room 4</b>	03.06.08: 17.40-19.40	<b>Chair: D. Sotiropoulos</b>	<b>CHEMISTRY/ PHYSICS/ 2</b>
		Cristian C. Bordeianu, Călin Beșliu, Alexandru Jipa, Daniel Felea, Ioan V. Grossu, Tiberiu Eșanu	Stability study for quark systems using a semi-classical billiard model
		Gaetana Gambino, Maria Carmela Lombardo, and Marco Sammartino	Cross-diffusion driven instability and pattern formation for a nonlinear reaction diffusion system
		A.E. Hramov, A.A. Koronovskii, M.K. Kurovskaya	Characteristics of Eyelet Intermittency
		Rahim Gul	Heat Transfer from Solids with Variable Thermal Conductivity and Uniform Internal Heat Generation Using HPM
		Ali Moghani	The Integer-valued Characters for Sponge
<b>Room 5</b>	03.06.08: 17.40-19.40	<b>Chair: I. Liritzis</b>	<b>APPLICATIONS</b>
		Ioannis Liritzis	Twelve Thousand Years of Non-Linear Cultural Evolution: the Physics of Chaos in Archaeology
		Anker Fjeld Simonsen	Application of music (ve chaos in music (verhulst))
		Angela Repanovici, Luciana Cristea, Ioana Nicolae, Marian Repanovici	Information Searching and Use of Information Sources in Papers Writing: Engineering Students Learning Model
<b>MAICh</b>	03.06.08: 20.00-21.00		<b>Welcome Reception</b>

<b>Wednesday June 4</b>			
<b>SCS3</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS3</b>	
<b>Room 1</b>	04.06.08: 9.00-10.40	<b>Chair: Anatoly A. Kolesnikov</b>	<b>SYNERGETICS I</b>
		Anatoly A. Kolesnikov	Synergetics Law of Gravity: Invariants and Basic Quotients (part I)
		Anatoly A. Kolesnikov	Synergetics Law of Gravity: Applied and Generally Scientific Effects (Part II)
		Alexander D. Lukjanov	On a cutting process model with variable delay
		Roger Dougal Gennady E. Veselov, Igor Kondratiev	Anti-Chaotic Control for Power Converters Using Synergetic Control Theory
<b>Room 2</b>	04.06.08: 9.00-10.40	<b>Chair: W. M. Macek</b>	<b>PLASMA/ 1</b>
		Aleksandr Chernyshov, Kirill Karelsky, Arakel Petrosyan	Large Eddy Simulation of MHD Turbulence in Space Plasma
		Pramod Kumar, Awadhesh Prasad, R. Ghosh	Stable phase locking of a diode laser subjected to external optical injection
		Hamida O. Ashraee, Ehsan O. Elshummkhi	Measuring and analyzing the magnetic field in (SERAJ system) theta pinch device using the Magnetic probes
<b>Room 3</b>	04.06.08: 9.00-10.40	<b>Chair: G. Unal</b>	<b>MATHS/ 3</b>
		Omur Umut	Chaos Synchronization of Genesio System
		Yulia V. Sharko	Quantization of the Lyapunov functions
		N.A. Moslemipour	Constructing New Standard Frame in Hilbert A-Modules
		D.J.Natsios	Estimation of the correlation decay rate for Chaotic Intermittency Maps
<b>Room 4</b>	04.06.08: 9.00-10.40	<b>Chair: V. Lucarini</b>	<b>NONLINEAR SYSTEMS</b>
		Valerio Lucarini	From symmetry breaking to Poisson point process in 2D Voronoi tessellations: the generic nature of hexagons
		Nikolaos M. Stavrakakis	Uniqueness Versus Attractors: Discussion of Some Nonlinear Problems
		R. S. Thakkar, P. J. Bhatt	Chaos with Fractal Trap for cubic family of functions
		Dario Domínguez, Karol Toro, Mariela Marín	Transformation of Classical Fractals applying Fractional Operators
<b>Aristotle</b>	04.06.08: 10.40-11.30	<b>Keynote Session (Chair: D. Sotiropoulos) Alexander G. Ramm</b> Mathematics Department, Kansas State University, Manhattan, Kansas, USA	<a href="#">Creating Materials with a Desired Refraction Coefficient</a>
<b>MAICh</b>	11.30-12.00		<b>Coffee Break</b>

SCS4		SPECIAL AND CONTRIBUTED SESSIONS SCS4	
<b>Room 1</b>	04.06.08: 12.00-14.00	<b>Chair: Thomas H. Seligman</b>	<b>HAMILTONIAN AND QUANTUM CHAOS</b>
		Thomas H. Seligman	Chaotic environments and chaotic perturbations in quantum information: A random matrix description
		F. Borondo	The scar phenomenon revisited
		Tomaz Prosen	Third quantization: a general method to solve master equations for quadratic open Fermi systems
		Thomas Guhr	Superscars in the Barrier Billiard as Doorways into a Stochastic Background
		Thomas Friedrich	Pulse transmission through open classical and quantum billiards with mixed dynamics: Periodic and aperiodic recurrence times
<b>Room 2</b>	04.06.08: 12.00-14.00	<b>Chair: R. Sprik</b>	<b>ELECTRONICS / ELECTROMAGNETISM</b>
		Rudolf Sprik	Multi Channel Wave Transfer in Sparsely Connected Systems
		Prashant Yadav, Prashant Kumar, Suman Dahiya	Common Mode CMOS OTA with Enhanced Slew Rate and Gain Bandwidth
		Artem Balyakin	Chaotic dynamics of electromagnetic field in nonlinear Bragg gratings
		R. Shabani, H. Salarieh, A. Alasty, S. Tariverdilo	A New Non-linear Electromagnetic Force Model, Part I: Experimental Investigation and results
		Farhad Farokhi, Bizhan Farokhi	Time Series Analysis in Chaotic Chua's Circuit
		R. Shabani, H. Salarieh, A. Alasty, S. Tariverdilo	A New Non-linear Electromagnetic Force Model, Part II: Non-linear Identification
<b>Room 3</b>	04.06.08: 12.00-14.00	<b>Chair: P. Manneville</b>	<b>HYDRO/ FLUID DYNAMICS</b>
		Jaana Kaldal	The processes responsible for the extreme intermittency by turbulent mixing
		Aleksandr Yu. Shvets, Tatyana S. Krasnopolskaya	Deterministic chaos in some nonideal hydrodynamic systems
		V.A. Vladimirov	Compacton-like solutions of some nonlocal hydrodynamic-type models
		Gennadiy V. Sandrakov	The influence of viscosity on oscillatory fluid dynamics
		Rytis Paskauskas	Dynamical bottlenecks to intramolecular energy flow
<b>Room 4</b>	04.06.08: 12.00-14.00	<b>Chair: V. Gasanenko</b>	<b>STOCHASTIC</b>
		V.A. Gasanenko, R. De Luca	On stochastic Dynamical Behavior of Two-Junction Interferometers
		Loskutov E.M	Constructing parametrized models of stochastic systems by time series and prognosis of their qualitative behaviour
		Alexandra Chronopoulou	Self-similarity/Memory-length Parameter Estimation for non-Gaussian Hermite Processes via Chaos Expansion
		Dominique Guégan, Justin Leroux	Forecasting chaotic systems: The role of local Lyapunov exponents
		George Matalliotakis, Charilaos Skiadas and Christos H. Skiadas	Modeling and Analysis of Life Table Data of France
MAICh	04.06.08: 14.00-15.00		<b>Lunch</b>
Excursion	04.06.08: 15.00-21.00		<b>Excursion to Elafonisi</b>

<b>Thursday June 5</b>			
<b>SCS5</b>	<b>SPECIAL AND CONTRIBUTED SESSIONS SCS5</b>		
<b>Room 1</b>	05.06.08: 9.00-10.40	<b>Chair: Anatoly A. Kolesnikov</b>	<b>SYNERGETICS</b>
		Alexander D. Lukjanov	Synergetic approach to surface quality of cutting treated details
		Andrew N. Popov, Alexandr A. Kolesnikov	Synergetic synthesis of algorithms creating regular and chaotic oscillations in controlled engineering systems
		Vladimir A. Petrakov, Andrew N. Popov	Synergetic synthesis of electrical drive power saving control laws
		Gennady E. Veselov	Synergistics synthesis of hierarchical control systems
<b>Room 2</b>	05.06.08: 9.00-10.40	<b>Chair: M. Christodoulou</b>	<b>SELF-ORGANIZATION/ CONTROL</b>
		Georgios Kaloutsakis	Chaotic Behavior of a Self-Replicating Robotic Population
		Roger Dougal Gennady E. Veselov, Igor Kondratiev	Anti-Chaotic Control for Power Converters Using Synergetic Control Theory
		Giannis Rompogiannakis, Spiros Maragkakis and Christos H. Skiadas	Control of Chaotic Dynamics in a Generalized Rational Model
		E.V.Krishnamurthy	Agent-based in silico* Modeling, Simulation and Animation of Nature -Inspired Smart Systems
<b>Room 3</b>	05.06.08: 9.00-10.40	<b>Chair: P. Meehan</b>	<b>MEDICINE/ PHYSIOLOGY</b>
		Paul Meehan	Chaotic Signal Analysis of Parkinson's Disease STN Brain Signals
		Lindley Kent M. Faina, Lorna S. Almocera and Polly W. Sy	Qualitative Analysis of A Three-Dimensional, Single-Strain HIV Model
		Yasaman Zandi Mehran, Nazanin Zandi Mehran, Zahra Ghassemi	Strange Attractor Investigation to Detect a Functional Gastrointestinal Disorder
		S. Sundar	Analysis of Patient Specific Chaotic Optimization Model for Fuzzy based Epilepsy Risk Level Detection from EEG Signals
<b>Room 4</b>	05.06.08: 9.00-10.40	<b>Chair: J. Tresl</b>	<b>ECONOMY/ MARKET/ 1</b>
		Loretti I. Dobrescu, Dumitru Oprisy	Hopf bifurcation and chaos analysis of a discrete delay dynamic model for a stock market
		Dagmar Blatna, Jiri Tresl	Chaotic Phenomena at Czech Capital Market
		Anastasios Saraidaris, Athanasios Margaritis	Is there a Chaos occurrence in Athens Exchange? Testing chaotic behavior in bank stocks and ATHEX indices
		Daphne Halkias, Paul W. Thurman, Geoffrey T. Mills, Nicholas Harkiolakis	The Emergence of Complexity in Psychological Economics and its Application to Strategic Planning in Immigrant Entrepreneurship
<b>Aristotle</b>	05.06.08: 10.40-11.30	<b>Keynote Session (Chair: Thomas H. Seligman) Tassos Bountis</b> Department of Mathematics and Center for Research and Applications of Nonlinear Systems, University of Patras, Patras, GREECE	<b>Order and Chaos in Multi-Dimensional Hamiltonian Systems</b>
<b>MAICH</b>	05.06.08: 11.30-12.00	<b>Coffee Break</b>	

<b>Aristotle</b>	05.06.08: 12.00-12.50	<b>Keynote Session (Chair: T. Bountis)</b> <b>Valerio Lucarini</b> Department of Physics, University of Bologna, Bologna, Italy	<a href="#">Response Theory for Equilibrium and Non-Equilibrium Statistical Mechanics: Causality and Generalized Kramers-Kronig Relations</a>
<b>Aristotle</b>	05.06.08: 12.50-13.40	<b>Keynote Session (Chair: T. Bountis)</b> <b>Tomasz Kapitaniak</b> Institute of Applied Mechanics, Technical University of Lodz, Lodz, POLAND	<i>Coin Tossing is Predictable</i>
<b>MAICh</b>	05.06.08: 13.40-15.00		<b>Lunch</b>
<b>SCS6</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS</b> <b>SCS6</b>	
<b>Room 1</b>	05.06.08: 15.00-16.40	<b>Chair: Boon Leong Lan</b>	<b>DYNAMICAL SYSTEMS II</b>
		Carlo Cattani	Wavelet analysis of chaotic dynamical systems
		Boon Leong Lan	Disagreement between Newtonian and Relativistic Trajectories at Low Speed
		Huang, Weihong	On Complete Transformations that Preserve Absolutely Continuous Invariant Measures
		Valentin N. Bukov	Projective systems and embedding technology
		Pawel Gora	Invariant densities for piecewise linear, piecewise increasing maps
<b>Room 2</b>	05.06.08: 15.00-16.40	<b>Chair: Anatoly A. Kolesnikov</b>	<b>SYNERGETICS II</b>
		Vilor L. Zakovorotny, Alexander D. Lukjanov	System synthesis of machine tool manufacturing process based on synergetic conception
		Anatoly A. Kolesnikov, Andrew A. Kuzmenko	Hierarchical control of multi-machine power system: synergetics approach
		Anatoly A. Kolesnikov, Alexandr A. Kolesnikov	Lorenz Model Structure
		Anatoly A. Kolesnikov, Viktor A. Kobzev, and Alexey S. Mushenko	Amphibian aircraft take-off and landing under heavy sea conditions with chaotic dynamics
<b>Room 3</b>	05.06.08: 15.00-16.40	<b>Chair: S. Nikolov</b>	<b>MECHANICS/ 1</b>
		Sergio Albeverio, Olga Rozanova	The non-viscous Burgers equation associated with random positions in coordinate space: a threshold for blow up behaviour?
		Svetoslav Nikolov	A Numerical Investigation of the Modified Sherman Systems
		Faisal Shahzad	Oscillatory flow of fourth order fluid in a porous half space
		Banlue Srisuchinwong, Chun-Hung Liou, Tepdumrong Klongkumnuankan	Prediction of Dominant Frequencies of CFOA-Based Sprott Sinusoidal and Chaotic Oscillators
<b>Room 4</b>	05.06.08: 15.00-16.40	<b>Chair: P. Commendatore</b>	<b>ECONOMY/ MARKET/ 2</b>
		Daniela Marinescu, Ioana Ramniceanu, Dumitru Marin	The First Order Approximation of the Optimal Contract in an Economic System
		Pasquale Commendatore, Cesare Palmisani	Complex behaviour in the Pasinetti-Solow model with optimal saving behaviour
		Miroslav Verbic	On the Role of Memory in an Asset Pricing Model with Heterogeneous Beliefs
		Cristina Coculescu, George Carutasu, Radu Despa, Ovidiu Folcut	Possibilities of Applying of subtle Sets in Qualitative and Quantitative Study of Information Relevance
		Yannis Dimotikalīs	Local forecasting in non-autonomous economic systems
<b>MAICh</b>	05.06.08: 16.40-17.00		<b>Coffee Break</b>

<b>SCS7</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS7</b>	
<b>Room 1</b>	05.06.08: 17.00-19.00	<b>Chair: Wieslaw M. Macek</b>	<b>PLASMA/ 2</b>
		Victor J Law, B Twomey, N .O'Connor, D P Dowling, S Daniels	Visualization of Atmospheric Pressure Plasma Electrical Parameters
		Constantine L. Xaplanteris, Eleni Filippaki	Plasma-surfaces interaction and improvement of plasma conservation system by application of a d.c. electrical potential
		Yurij Kyzuyurov	Chaotic Plasma Inhomogeneities in a Plage Region of the Solar Photosphere
		Wieslaw M. Macek	Chaos and Multifractals in the Solar System Plasma
<b>Room 2</b>	05.06.08: 17.00-19.00	<b>Chair: A.V. Glushkov</b>	<b>NATURE/1</b>
		E. Musikhina	The space-time model of natural system conditions evaluating
		Vassilis Rothos	Travelling waves in nonlinear lattices and applications
		A.V. Glushkov, A.A. Svinarenko, O.Yu. Khetselius, N.G. Serbov	The sea and ocean 3D acoustic waveguide: stochastic modeling and chaos phenomena
		A.V. Glushkov, A.A. Svinarenko, Ya.I.Lepikh	Multi-fractal analysis of signals of the seismic acoustic emission
		A.N. Valyaev, S.A. Erochin, T.V. Tusova	Processes under outbursts of mountain lakes and model for risk assessment
<b>Room 3</b>	05.06.08: 17.00-19.00	<b>Chair: A. Hatami</b>	<b>MECHANICS/ 2</b>
		Arash Hatami	Chaotic Vibration of an Axially Moving Viscoelastic Beam because of Speed Fluctuations
		David Becerra Alonso, Valery Tereshko	Deterministic chaos in Malkus' Waterwheel
		Milad Khosravi Larijani, Seied Adib Abrishamifar	The function of three phase induction motor with secondary impedance control
		Vadim Anishchenko, Anna Zakharova, Tatyana Vadivasova	The synchronization of chaos with narrow-band noise
		Oleg Antoniuk, Rudolf Sprik	Measurement and Simulation of Random Matrix Statistics in Aluminum Mesoscopic Cavities
<b>Room 4</b>	05.06.08: 17.00-19.00	<b>Chair: J. Sprott</b>	<b>ELECTRIC /TECHNOLOGY</b>
		John K. Sakellaris	Finite Element Analysis of Micro – Electro – Mechanical Systems by using the ANSYS software
		Konstantinos E. Chlouverakis, Apostolos Argyris, Adonis Bogris, Dimitris Syvridis	A Novel Monolithic Integrated Optical Chaos Emitter: Experiment, Data Analysis and Numerical Predictions
		Hanping Hu, Ziqi Zhu, Mengfan Cheng, Xi Li	A Highly Robust Chaotic Synchronization Scheme and its Application in Secure Communication
		Fabio Lepreti	Study of the Yaglom relation for electrostatic turbulence in reversed field pinch devices
		Diego Sanjinés and Gonzalo M. Ramírez Ávila	The route to chaos of a Bloch electron in a square potential well under a homogeneous electric field

<b>PS</b>	05.06.08: 19.00-20.00	<b>POSTER SESSION</b>	
		Simona Dontu, D. Savastru, M.Ciobanu	Chaotic behavior evidencing of foehnal events in Romania
		Simona Dontu, D. Savastru, M.Ciobanu	Chaos and predictability; applications
		Ricardo Fariello	Henon-Heiles Oscillators Coupled to a Heath Bath
		Otto Hadač, Martin Kohout, Igor Schreiber, Miloš Marek	Chaotic behavior of photochemical processes within the mesopause region and its analysis of the reaction mechanism
		Despina Hatzivagousti	Allee Effect with Population Dependence of Dispersal Probability
		B. Rashidian, M. Amidpour, M. R. Jafari Nasr	Modeling the transient response of the thermosyphon heat pipes
		Yun Sheng, Guang-qiang Wu, Xian-jie Meng	Study on bifurcation, chaos and chaotic control of vehicle suspension with nonlinearities under road excitation
		A.S. Zakharova, T.E. Vadivasova, V.S. Anishchenko	Diffusion coefficient of instantaneous phase and the threshold of chaos synchronization
		Avinash Parashar	Mathematical modelling of optical MEMS based filter for IR range
		K. Taibi, S.A. Koua, D. Dahmoun, M. Azzaz	Numerical model and characterization of porous solids
		M. Azzaz, S.A. Kaoua, D. Dahmoun	A Twin Helical Spring Numerical Modeling under Tension Loading
		E. Shchekinova, J. Bartussek, S. N. Fry, M. Zapotocky	Neural Flight Control Circuits in Insects
		Eleni I. Vlahogianni, Matthew G. Karlaftis and John C. Golias	Recurrence Quantification Analysis of Short-Term Traffic Flow Dynamics
<b>MAICH</b>	05.06.08: 21.00-24.00		<b>Farewell Dinner</b>
		<b>Friday June 6</b>	
<b>SCS8</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS8</b>	
<b>Room 1</b>	06.06.08: 9.00-10.40	<b>Chair: M. Christodoulou</b>	<b>NEURAL NETWORKS</b>
		D.C. Theodoridis, Y.S. Boutalis, M.A. Christodoulou	A New Indirect Adaptive Neuro – Fuzzy Control algorithm with proof of error convergence and stability
		M.A.Christodoulou and C.Kontogeorgou	Automatic collision avoidance in commercial aircraft three dimensional flights, using neural networks and non-linear programming
		George Atsalakis, Dimitrios Nezis and Christos H. Skiadas	Forecasting Chaotic time series by a Neural Network
<b>Room 2</b>	06.06.08: 9.00-10.40	<b>Chair: B. Kruglikov</b>	<b>ENTROPY / MODELING</b>
		S.V. Manyele, J.-X. Zhu	Accuracy Analysis for Kolmogorov Entropy used in studying the Chaotic Dynamics of CFB Reactors based on Solids Concentration Fluctuations
		Andrew Walcott Beckwith	How the creation and destruction of early universe instantons leads to chaotic generation of entropy
		Boris Kruglikov	Piecewise affine models for SOC and networks
		Yasaman Zandi Mehran, Ali Motie Nasrabadi	Wavelet Entropy Analysis of GEA Signal to Abnormal Pattern Recognition

<b>Room 3</b>	06.06.08: 9.00-10.40	<b>Chair: Gazanfer Unal</b>	<b>NON LINEAR SYSTEMS</b>
		Stephan M. Winkler, Michael Affenzeller, Stefan Wagner	On the Reliability of Nonlinear Modeling Using Enhanced Genetic Programming Techniques
		Gazanfer Unal and Ismail Iyigunler	Integration of nonlinear stochastic differential equations driven by compound Poisson processes via linearization
		M.S.M. Noorani	Closed Orbits Asymptotic of $\beta$ -Transformations via Zeta Functions
		Sajid Iqbal, Muhammad Rafiq, Shahid Iqbal, Muhammad Ozair Ahmed, Hadeed Ahmed Sher	Study of Nonlinear Dynamics Using Logistic Map
<b>Room 4</b>	06.06.08: 9.00-10.40	<b>Chair: R. Monetti</b>	<b>TIME SERIES</b>
		Dmitry Mukhin	Reconstruction of high dimensional dynamic systems from time series by stochastic models
		Ricardo David Valdez-Cepeda, Olivia Delgadillo-Ruiz, Rafael Magallanes-Quintanar, Agustín Enciso-Muñoz, Gerardo Miramontes-De León, José Luis García-Hernández, Blanca Mendoza	Scaling laws and chaos in Mexico's normalized yearly mean grain yield anomaly time series
		Ioannis Vlachos, Dimitris Kugiumtzis	State space reconstruction from multiple time series
		Roberto Monetti	Characterizing Synchronization in Time Series using Information Measures Extracted from Symbolic Representations
<b>Aristotle</b>	06.06.08: 10.40-11.30	<b>Keynote Session (Chair: D. Sotiropoulos) Bogdan I. Epureanu</b> Department of Mechanical Engineering, University of Michigan-Ann Arbor, USA	<a href="#">Creating and Exploiting Nonlinear and Chaotic Dynamics for System Interrogation in Sensing and Damage Detection</a>
<b>MAICh</b>	06.06.08: 11.30-12.00		<b>Coffee Break</b>
<b>SCS9</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS9</b>	
<b>Room 1</b>	06.06.08: 12.00-13.40	<b>Chair: C.T.D. Dodson</b>	<b>QUANTUM</b>
		C.T.J. Dodson	A note on quantum chaology and gamma approximations to eigenvalue spacings for infinite random matrices
		Kourosh Nozari	Possibility of Higher Order Derivative in Quantum Spacetime
		Valentin V. Sokolov, Oleg V. Zhirov, Giuliano Benenti, Giulio Casati	Quantum Chaos: Degree of Reversibility of Quantum Dynamics of Classically Chaotic Systems
		A. R. Gharaati	Some Analytical Aspects of Quantum Kicked Rotator
		Mahmoud Abdel-Aty	Distinctive features of mixed states Pancharatnam phase
<b>Room 2</b>	06.06.08: 12.00-13.40	<b>Chair: S. A. Pietsch</b>	<b>NATURE/2</b>
		Levent Yilmaz	Fractal Dimension of Meandering Rivers
		Stephan A. Pietsch	Interpreting stable and unstable ecosystem model behaviour
		Valeriy I. Klenov	Chaos and GeoDynamics in Nature Systems: Virtual Nature Systems Approach
		Jorge Alberto Revelli, Miguel Angel Rodriguez, Horacio Sergio Wio	External Noise Effects on Spatiotemporal Chaotic System
		R. Magallanes-Quintanar, R.D.Valdez-Cepeda, B.Mendoza, L.Gaytán-Ortiz, A.Enciso-Muñoz, G.Miramontes-De León, A.García-Aguilar, L.Trueba-Vázquez, G.A. Mercado-Sánchez	Self-affinity and $f$ - $\beta$ noise of monthly extreme temperatures

<b>Room 3</b>	06.06.08: 12.00-13.40	<b>Chair: R. Sprik</b>	<b>CHEMISTRY/ PHYSICS/1</b>
		Guenter Schmitt	Maximum ('Freak') Energy Densities. Quantify Maximum Fluid-Wall Interactions
		Nikos Kouvaris	Diffusion in spatially extended reactive systems
		Eugenia Stepanova	Dye transfer in a composed vortex flow with a free surface
		N. Banihashemi, A. Fakharzadeh J	Comparing the Extended Conjugate Gradient and Embedding Methods to Solve the Regulator Control Problems with Chemical Applications
<b>Room 4</b>	06.06.08: 12.00-13.40	<b>Chair: A. Loengarov</b>	<b>COMPUTING /PROGRAMMING</b>
		Andreas Loengarov, Valery Tereshko	Excitability, Oscillations and Multiple Attractors in the Map...
		H. A. Ali, Mostafa S. Saleh, M. A. Abas	Specific Mathematical Model of Memory Sharing Predictor
		Alexander Yu. Simonov	Spiking pattern formation in a network of synaptically coupled neurons with axonal delays
		Ali Eldosouky, H. A. Ali, M. A. Abas	Overcoming Performance Degradation of Enormous Systems
<b>MAICh</b>	06.06.08: 13.40-15.00		<b>Lunch</b>
<b>SCS10</b>		<b>SPECIAL AND CONTRIBUTED SESSIONS SCS10</b>	
<b>Room 1</b>	06.06.08: 15.00-17.00	<b>Chair: P. Manneville</b>	<b>ENGIN/ TECHNOLOGY/</b>
		Paul Manneville	Transitional plane Couette flow: Chaos or turbulence
		József Rohács	Effects of aerodynamic model structure on the aircraft high angle of attack dynamics
		Vladia Subkova	Application of the Theory of the Planned Experimental Model for Investigation of the Technological Objects in Drip Irrigation
		Anil Kumar	MHD free convective fluctuating flow through a porous effect with variable permeability parameter
		Sajid Iqbal, Tabrez A. Shami	Investigation of Chaotic Behavior in DC-DC Buck Converter
<b>Room 2</b>	06.06.08: 15.00-17.00	<b>Chair: S. Prants</b>	<b>METEOROLOGY /COSMOLOGY</b>
		Mikhail Kulikov	Mechanism of formation of Reactive-Diffusional Waves in the Mesospheric Photochemical System
		Milen Tsekov	Periodicity and Trends in Meteorological Data and the Detection of Low-Dimensional Chaos
		Andrey Gritsun	Unstable periodic orbits and attractor of barotropic atmospheric system
		Christos Anagnostou, Aristomenis Karageorgis, Andreas Sioulas	Tracing feedback processes for the abrupt climate change during the last glacial – interglacial period from sediment records. Case study: Sediment records from semienclosed marine areas around the Greek peninsula
		R. Magallanes-Quintanar, R.D. Valdez-Cepeda, E. Borjón Robles, A. Enciso-Muñoz, G. Miramontes de León, J.L. García-Hernández	Wavelet coherence analysis for the detection of coupling signals using series of precipitation, solar activity and ENSO
		A. Toporensky	Chaotic dynamics in scalar field cosmology

<b>Room 3</b>	06.06.08: 15.00-17.00	<b>Chair: S. Hoogendoorn</b>	<b>TRAFFIC</b>
		Serge Hoogendoorn	Pedestrian Self-Organization: Experiments and Theory
		Lei Yu, Zhongke Shi	Density wave in a new anisotropic continuum model for traffic flow
		Nicholas Harkiolakis	M &As Analogies to Collisions of Physical Objects
		Serge Hoogendoorn	Modeling Traffic Phase Transitions
		Farhad Farokhi, Bizhan Farokhi	Chaos Control by Non-feedback Methods in the Motion of Two Competing Vehicles with Traffic Lights
<b>Room 4</b>	06.06.08: 15.00-17.00	<b>Chair: M. Christodoulou</b>	<b>SIMULATION</b>
		Sungyun Kim	Undecidability, entropy and information loss in classical physics simulation
		E. Rajabi	Intelligent Turbulence Modeling using Direct Numerical Simulation
		Milad Khosravi Larijani, Seied Adib Abrishamifar	Simulation of Induction motor by the aid of H Bridge
		Farah Zaknoun, Houssam El-Rassy, Mazen Al-Ghoul, Samia Al-Joubaily, Tharwat Mokalled and Rabih Sultan*	Simulation of geochemical self-organization: acid infiltration and mineral deposition in a porous ferruginous limestone rock
<b>Aristotle</b>	06.06.08: 17.00-17.30		<b>Closing Ceremony</b>
<b>Excursion</b>	7.06.08	<b>Saturday June 7</b>	<b>Excursion to Knossos and the Museum</b>