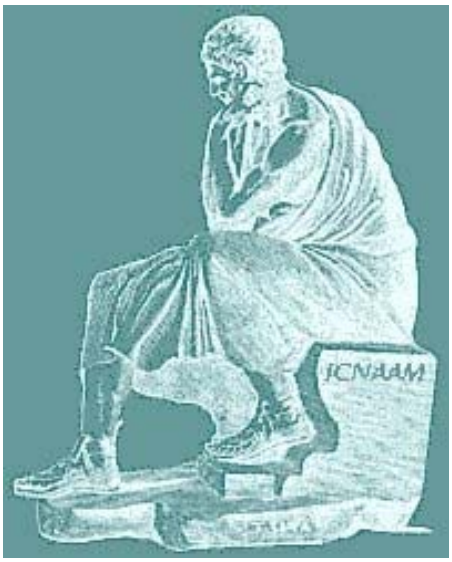
ICNAAM 2012



Preliminary PROGRAM

19 – 25 September 2012

CONFERENCE CENTER:

Kypriotis International Convention Center, Kos, Greece

Under the Auspices of

European Society of Computational Methods in Sciences, Engineering and Technology (ESCMCET)

Chairman and Organizer

Prof. Dr. T.E. Simos, President of ESCMSET, Member of the Editorial Board of the Annals of the European Academy of Sciences, Active Member of the European Academy of Sciences and Arts, Active Member of the European Academy of Sciences, Corresponding Member of the European Academy of Arts, Sciences and Literature, College of Sciences, Department of Mathematics, King Saud University, P. O. Box 2455, Riyadh 11451, Saudi Arabia and Laboratory of Computational Sciences, Department of Computer Science and Technology, University of Peloponnese, GR-221 00 Tripolis, Greece.

Vice-Chairmen:

Prof. Dr. Ch. Tsitouras , Department of Applied Sciences, Technological Educational Institute of Chalkis, Greece .

Dr. G. Psihoyios, Laboratory of Computational Sciences, Department of Computer Science and Technology, University of Peloponnese, GR-221 00 Tripolis, Greece.

Assistant Professor Zacharias Anastassi, Department of Sciences, School of Pedagogical & Technological Education (ASPETE), N. Heraklion, GR-14121 Athens, Greece

Scientific Committee:

Dr. **Z.A. Anastassi**, Greece
Prof. **G. vanden Berghe**, Belgium
Prof. **Peter Bjørstad**, Norway
Prof**. S.C. Brenner, USA**
Prof. **Luigi Brugnano,** Italy
Prof. **J. Cash**, UK
Prof. **R. Cools**, Belgium
Prof. **A. Cuyt**, Belgium
Prof. **B. Fischer**, Germany
Prof. **R. W. Freund**, USA
Prof. **I. Gladwell**, USA
Prof. **Klaus Gürlebeck**, Germany
Prof. **Axel Klar**, Germany
Prof. **W. F. Mitchell**, USA
Dr. **G. Psihoyios, UK**
Prof. **T.E. Simos**, Greece
Prof. **W.Sprößig, Germany**
Prof. **Francis Sullivan, USA**
Prof. **Ch. Tsitouras, Greece**
Prof. **G. Alistair Watson**, UK

Organising Committee:

Mrs Eleni Ralli-Simou (Secretary of ICNAAM 2012)
Dr. G. Panopoulos
Dr. D. Papadopoulos
Mr. N. Papagiannopoulos
Dr. Mohammad Siddique, Department of Mathematics and Computer Science, Fayetteville State University, USA and Professor of Mathematics, Prince Sultan University, KSA

Wednesday 19 SEPTEMBER 2012

08:50 – 09:00 (ROOM 1)

OPENING CEREMONY

Professor Dr. T.E. Simos (Chairman) and
Dr. George Panopoulos
(Organizing Committee)

PLEASE ATTENTION

The Desk of the Conference will be open for Registration, Requests etc the following days and hours:

Tuesday	18/9/12: 11:30 – 14:00 and 17.00 – 20.00
Wednesday	19/9/12: 09:00 – 13:30, 16:30 – 20:30
Thursday	20/9/12: 09:00–13:00, 17:00 – 20:00
Friday	21/9/12: 09:30–13:00, 17:30 – 20:30
Saturday	22/9/12: 09:30–12:30
Sunday	23/9/12 10:00–13:00, 17:00 – 19:00
Monday	24/9/12 10:30–13:00, 17:00 – 19:00
Tuesday	25/9/12: 10:30–13:00

ANNOUNCEMENTS

1. Excursion – Central Dinner

Please inform the secretary about your participation in the excursion and the number of accompanying persons until 20 September 2012.
This is absolutely necessary in order to determine the number of busses for the excursion.

Also inform the secretary about your participation in the central dinner and the number of accompanying persons.

2. Receipts and Certifications

Receipts and Certifications will be delivered after 20 September 2012

ICNAAM 2012

Kypriotis Hotels and Conference Center, Kos, Greece, 19-25 September 2012

19 September 2012 SESSION: INVITED SPEAKER CHAIR: Martin Hairer (ROOM 1)		
09:00 – 10:00	Andrew Stuart, Kody Law and Marco Igleasias	The Ensemble Kalman Filter for Inverse Problems

19 September 2012 SESSION: INVITED SPEAKER CHAIR: Christian Corda (ROOM 1)		
10:00 – 11:00	Ruggero Maria Santilli	The Novel Mathematics Underlying Hadronic Mechanics for Matter and Antimatter
Coffee Break		

19 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: F. Smit (ROOM 1)		
11:30 - 12:00	*Giacomo Viccione and Vincenzo Tibullo*	An effective approach for designing circular pipes with the Colebrook-White formula
12:00 – 12:30	*F. Dierich and P.A. Nikrityuk*	Parallelization of the SIP Algorithm
12:30 – 13:00	*Adi T. Utomo, Ashkan I. T. Zavareh, Heiko Poth, Mohd Wahab, Mohammad Boonie, Phillip T. Robbins, Andrzej W. Pacek*	Heat Transfer Coefficient of Nanofluids in Minichannel Heat Sink
13:00 – 13:30	*B. Krasnopolsky, A. Starostin, and A. Osiptsov*	Multi-fluid Pipe Flow Model for Analysis of Wellbore Dynamics
Lunch Break		

19 September 2012 SYMPOSIUM ON INTEGRATED COMPUTATIONAL TOOLS FOR ADVANCED MANUFACTURING CHAIR: NUNO ALVES (ROOM 2)		
11:30 – 12:00	*Carina Ramos, Pedro Carreira, Paulo Bártolo, Nuno Alves*	Optimalmould-Part I: Multi-objective Optimization to Moulds Design for Injection of Polymers
12:00 – 12:30	*Carina Ramos, Pedro Carreira, Paulo Bártolo, Nuno Alves*	Optimalmould-Part II: Global Optimization of the Injection Moulding Cycle Time
12:30 – 13:00	*Paulo Bártolo*	Thermo-kinetic Curing Model for Stereolithographic Applications
13:00 – 13:30	*Artur Mateus, Paulo Bártolo, Geoffrey Mitchell*	Computational Fluid Dynamics of Reaction Injection Moulding
Lunch Break		

19 September 2012 SESSION: Numerical Methods for Stochastic Differential Equations and Their Applications CHAIR: Dongsheng Xu (ROOM 3)		
11:30 – 12:00	*Shanshan Jiang*	Stochastic Multi-symplectic Integrator for Stochastic KdV Equation
12:00 – 12:30	*Lijin Wang*	The Third Kind of Generating Functions of Stochastic Symplectic Integrators
12:30 – 13:00	*Jingjing Zhang*	A New Symplectic Method for a Linear Stochastic Oscillator via Stochastic Variational Integrators

19 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 1 Morning - Mathematics CHAIR: R. M. Santilli (ROOM 4)	
11:30 – 12.30	Introduction to Santilli Isonumbers Christian Corda
12.30 – 13.30	Studies on Lie-Santilli isotheory with unit of general form Ascar Aringazin
Lunch Break	

19 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Ali Sanayei (ROOM: 5)		
11:30 – 12:00	*Ali Sanayei*	Symposium Foreword
12:00 – 12:15	*S. Barry Cooper*	A Short Report from the Turing Centenary Advisory Committee Chair on the Alan Turing Year
12:15 – 13:00	*S. Barry Cooper*	From Natural Philosophy to Computation, and Back Again
Lunch Break		

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Kypriotis Hotels and Conference Center, Kos, Greece, 19-25 September 2012

19 September 2012 SESSION: Advances in OLAP and Datawarehousing CHAIR: Francisco Moreno (ROOM 5)		
13:00 – 13:30	***Juan C. Alzate, Francisco J. Moreno, and Jaime Echeverri***	**Spatio-Temporal Extension to the Map Cube Operator**

19 September 2012 SESSION: Generating Functions of Special Numbers and Their Applications CHAIR: I. Naci CANGUL (ROOM 6)		
11:15 – 11:45	***Y. Simsek***	Relations between Eulerian polynomials and Array Polynomials ‘
11:45 – 12:15	***V. Kurt***	A Study on the Hurwitz-Lerch Zeta Function and Some Identities on the Frobenious-Euler Polynomials
12:15 – 12:45	***R. Dere***	Remarks on the Frobenius-Euler polynomials on the Umbral algebra
12:45 – 13:15	***B. Kurt***	Some Identities on the Second Kind Bernoulli Polynomials and Second Kind Euler Polynomials
13:15 – 13:45	***A. A. Aygunes***	Weber functions and Weierstrass ℘-function associated with Hecke operators
13:45 – 14:15	***K.Erdem***	Bernoulli polynomial approach to High-Order Linear Differential Difference Equations

Lunch Break

19 September 2012 SYMPOSIUM: Semigroups of Linear Operators and Applications CHAIR: Ludovic Dan LEMLE (ROOM 7)		
11:30 – 11:50	*L.D. Lemle*, *D.M. Stoica*	On the Existence of Evolution Semigroups on L^{∞}
11:50 – 12:10	*D.M. Stoica*, *M. Megan*	Concepts of Dichotomy for Stochastic Skew-Evolution Semiflows in Hilbert Spaces
12:10 – 12:30	*A. Budiul*, *T. Vasiu*, *D.M. Stoica*	Mathematical Model for Preventive Maintenance Cycles. Study of Case
12:30 – 12:50	*L. Pascu*, *D.M. Stoica*, *A. Socalici*	Determining the Cooling Affected Volume by Adding Microcoolers in the Steel
12:50 – 13:10	*L. Pascu*, *A. Putan*, *V. Putan*, *A. Lascutoni*	Analysis on the Similarity Between Steel Ladles and Hot-Water Models Regarding Natural Convection Phenomena

19 September 2012 SESSION: Applications and Theory for Uncertainty Quantification and Optimization in Large-Scale Problems CHAIR: Kody J. H. Law and Marco Iglesias (ROOM 8)		
11:30 – 12:00	*Michaela Ottobre*	Markovian approximation of Classical Open Systems
12:00 – 12:30	*M.A. Iglesias-Hernandez*, *K.J.H. Law, and A.M. Stuart.*	MCMC for the evaluation of Gaussian approximations to Bayesian inverse problems in groundwater flow
12:30 – 13:00	*K.J.H. Law, and D. Bloemker, A.M. Stuart, and K. C. Zygalakis*	The 3DVAR Filter for The Navier-Stokes Equation: Accuracy and Stability in the Limit of High-Frequency Observations

19 September 2012 SESSION: Modeling of Multiphase Flows in Porous and Fissured Media CHAIR: Nikolai Botkin (ROOM 9)		
11:30 – 12:00	*Alexander A. Lukyanov*	A Meshless Multi-Point Flux Approximation Method
12:00 – 12:30	*Thomas G. Amler, Ibrahim Hoteit, Tariq A. Alkhalifah*	A Combined ADER-DG and PML Approach for Simulating Wave Propagation in Unbounded Domains
12:30 – 13:00	*Lautaro Rayo, Ibrahim Hoteit*	Ensemble Kalman Filter Regularization Using Leave One-Out Data Cross-Validation
13:00 – 13:30	*Mathias Trojer, Eduard R. Oberaigner*	Statistical Mechanics Approach Describing Gravity Driven Migration Phenomena in Non-Percolating Porous Media
13:30 – 14:00	*Nikolai Botkin, Martin Brokate, Karl-Heinz Hoffmann, Oleg Pykhteev, Varvara Turova*	Simulation of Hysteretic Effects in Multi-Phase Flows in Aquifers
Lunch Break		

19 September 2012 SESSION: Numerical Optimization and Applications CHAIR: Ana I Pereira and M. Fernanda Costa (ROOM 10)		
11:30 – 11:50	*David Bento, Diana Pinho, Ana I. Pereira and Rui Lima*	Cell-Free Layer (CFL) Analysis in a Glass Capillary: Comparison Between a Manual and Automatic Method
11:50 – 12:10	*Marcy A. Dias and Fernando C. Monteiro*	Optic Disc Detection Using Ant Colony Optimization
12:10 – 12:30	*Ana Sofia Torres and Fernando C. Monteiro*	Image Segmentation by Graph Partitioning
12:30 – 12:50	*Carlos Afonso, Fábio Ferreira, José Exposto and Ana I. Pereira*	Comparing Clustering and Partitioning Strategies
Lunch Break		

19 September 2012 SESSION: Statistics and Modelling III CHAIR: (ROOM 11)		
11:30 – 12:00	*Dietmar Ferger*	Empirical processes in stochastic optimization
12:00 – 12:30	*M. Ivette Gomes*	The Extreme Value Birnbaum-Saunders Model in Athletics
12:30 – 13:00	*Evrim Korkmaz Özay*	Möbius Transformational High Dimensional Model Representation on Multi-way Arrays
Lunch Break		

19 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: G. Warnecke (ROOM 1)		
15:00 – 15:30	*Eric Goncalves, Jean Decaix*	Numerical Simulation of Cavitating Tube Problems with Isothermal Model
15:30 – 16:00	*E. Goncalves and D. Zeidan*	Numerical Simulation of Cavitating Tube Problems with Non–Isothermal Model
16:00 – 16:30	*García-Cascales J.R., Otón-Martínez R.A., Vera-García F., Amat-Plata S., Sánchez-Velasco F.J., Bentaib A., Meynet N.,Bleyer A.*	Some Advances in the Characterization of Gas and Solid Mixtures under Low Pressure Conditions
16:30 – 17:00	*Jean Decaix, Eric Goncalves*	Study of Compressibility Effects on Turbulent Cavitating Flows
17:00 – 17:30	Coffee Break	

19 September 2012 SYMPOSIUM ON INTEGRATED COMPUTATIONAL TOOLS FOR ADVANCED MANUFACTURING CHAIR: NUNO ALVES (ROOM 2)		
15:00 – 15:30	*Belbut Gaspar,* *N. Martins-Ferreira*	Maximizing the Placement of Congruent Polyhedra in a Parallelepiped Container
15:30 – 16:00	*Inês Oliveira,* *Nuno Leal,* *Pedro Silva,* *A. da Costa Ferreira, Rui J. Neto,* *F. Jorge Lino,* *Ana Reis*	Advanced Engineering Tools for Design and Fabrication of a Custom Nasal Prosthesis
16:00 – 16:30	*Pedro F. Silva,* *Nuno Leal,* *Rui J. Neto,* *F. Jorge Lino,* *Ana Reis*	Custom Hip Prostheses by Integrating CAD and Casting Technology
16:30 – 17:00	*Shenghua Wu,* *Ana Reis,* *Pedro Teixeira,* *A. Barata da Rocha, Jorge Lino*	Damage Prediction in Incremental Forming by using Lemaitre Damage Model
17:00 – 17:30	Coffee Break	

19 September 2012 SESSION: Numerical Methods for Stochastic Differential Equations and Their Applications CHAIR: Lihai Ji, Xiuling Yin (ROOM 3)		
15:00 – 15:30	*Lihai Ji*	Stochastic Multi-symplectic Wavelet Collocation Method for Stochastic Hamiltonian Maxwell's Equations
15:30 – 16:00	*Dongsheng Xu*	A Class of Numerical Methods with One Parameter for Backward Stochastic Differential Equations
16:00 – 16:30	*Xiuling Yin*	The Well-posedness of A Special Partial Differential Equation

19 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 2 Afternoon - Mathematics CHAIR: R. M. Santilli (ROOM 4)	
15:00 – 16:00	Fundamentally Very Thin H/v-Structure Thomas Vougiouklis
16:00 – 17.00	Santilli Category of Isotopic Groups Stephan Moskaliuk

19 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Renzo Ricca (ROOM: 5)		
15:00 – 15:45	*Daniel L. Stein*	Rugged Landscapes and Timescale Distributions in Complex Systems
15:45 – 16:30	*Burton Voorhees*	Virtual Stability: A General Complex Systems Principle?
16:30 – 17:00	*Roman Senkerik*	Influence of Chaotic Dynamics on the Performance of Evolutionary Algorithms – A Primary Study
17:00 – 17:30	Coffee Break	

19 September 2012 SESSION: Generating Functions of Special Numbers and Their Applications CHAIR: Y. Simsek (ROOM 6)		
15:00 – 15:30	*I. N. Cangul, A.Yurttas, M. Togan and A. S. Cevik*	Some formulae fort he Zagreb indices of graphs
15:30 – 16:00	*B. Ozgur A. Yurttas and I. N. Cangul*	Determining the minimal polynomial of cos(2npi/n) over Q with Maple
16:00 – 16:30	*A. Yurttas, B. Ozgur and I. N. Cangul*	Calculation of the minimal polynomial of 2cos(npi/q) over Q with maple
16:30 – 17:00	*M. Alkan*	On Dedekind Modules
Coffee Break		

19 September 2012 SESSION: Operational Research and Applications CHAIR: Fernanda A. Ferreira (ROOM 7)		
15:00 – 15:20	*Fernanda A. Ferreira*	International Stackelberg model with tariffs
15:20 – 15:40	*Fernanda A. Ferreira and Flávio Ferreira*	Desirable role in an international duopoly model with tariffs
15:40 – 16:00	*Kashif Rashid, William Bailey and Benoît Couët*	Large-scale expensive blackbox function optimization
16:00 – 16:20	*Francesc Llerena and Cori Vilella*	An axiomatic characterization of the strong constrained egalitarian solution
16:20 – 16:40	*San-Nah Sze, Ada Ng Suk-Fung and Kang-Leng Chiew*	An Insertion Heuristic Manpower Scheduling for In-Flight Catering Service Application
16:40 – 17:00	*San-Nah Sze, Kang-Leng Chiew and Jeeu-Fong Sze*	Multi-trip Vehicle Routing and Scheduling Problem with Time Window in Real Life

19 September 2012 SESSION: Numerical Optimization and Applications CHAIR: Ana I Pereira and M. Fernanda Costa (ROOM 10)		
15:00 – 15:20	*M. Fernanda P. Costa and C. Ribeiro*	Generalized Fractional Maxwell Model: Parameter Estimation of a Viscoelastic Material
15:20 – 15:40	*Jairson Dinis, Ana I. Pereira and Elza M. Fonseca*	Mathematical Model for the Assessment of Fracture Risk Associated with Osteoporosis
15:40 – 16:00	*Fernando C. Monteiro and Aurélio C. Campilho*	Distance Measures for Image Segmentation Evaluation
16:00 – 16:20	*M.F. Teodoro*	Numerical Approximation of a nonlinear Delay-Advance Functional Differential Equation by a Finite Element Method
16:20 – 16:40	*Ana S. R. Brásio, Andrey Romanenko and Natércia C. P. Fernandes*	System identification as an application of optimization
16:40 – 17:00	*Teófilo Melo and M. Teresa T. Monteiro, João Matias*	Solving a Signalized Traffic Intersection Problem with an Hyperbolic Penalty Function

19 September 2012 SESSION: Statistics and Modelling III CHAIR: (ROOM 11)		
15:00 – 15:30	*Jan Picek*	Estimators of Extreme Value Index in Linear Regression Model
15:30 – 16:00	*M. Stehlik*	On estimation of Pareto tail
16:00 – 16:30	*Wolf-Dieter Richter*	Exact distributions under generalized normality assumptions
16:30 – 17:00	*Polychronis Economou*	How to identify the used sampling mechanism
17:00 – 17:30	Coffee Break	

19 September 2012 SESSION: INVITED SPEAKER CHAIR: Andrew Stuart (ROOM 1)		
17:30 – 18:30	Martin Hairer	Approximations to rough stochastic PDEs
19 September 2012 SESSION: INVITED SPEAKER CHAIR: Luigi Brugnano (ROOM 1)		
18:30 – 19:30	Denis Talay	New theoretical and numerical stochastic approaches for parabolic diffraction problems

19 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: P. Kosinski (ROOM 1)		
19:35 – 20:05	*Zdenek Chara, Bohus Kysela and Pavel Vlasak*	Velocity Field around a Falling Particle
20:05 – 20:35	*Shiva P. Pudasaini and Stephen A. Miller*	Buoyancy Induced Mobility in Two-phase Debris Flow
20:35 – 21:05	*H. Sarlak, J. N. Sørensen and R. Mikkelsen*	Large Eddy Simulation of Atmospheric Boundary Layer over Wind Farms using a Prescribed Boundary Layer Approach

19 September 2012 SESSION: Computational Nanomaterials CHAIR: Yakup Hundur (ROOM 2)		
19:35 – 20:05	*Şule Celasun*	Secret of Nanomaterials
20:05 – 20:35	*Yakup Hundur and Burçin Danacı*	Thermal Effects on Nickel

19 September 2012 SESSION: Applied Mathematics CHAIR: Andrzej Więckowskich (ROOM 2)		
20:35 – 21:05	*Andrzej Więckowskich*	Planning and Numerical Network Modelling Method NNM

19 September 2012 SESSION: Applied and Numerical Mathematics I CHAIR: Cidália Neves (ROOM 3)		
19:35 – 20:05	*Adérito Araújo, Cidália Neves and Ercília Sousa*	A Laplace Transform Piecewise Linearized Method for a Second Order Hyperbolic Equation
20:05 – 20:35	*Mantas Landauskas, Jurate Ragulskiene and Minvydas Ragulskis*	H-rank as a Control Tool for Discrete Dynamical Systems

19 September 2012 SESSION: Approximation, Scientific Computation and Applications “ASCA-2012" CHAIR: Gradimir V. Milovanović (ROOM 5)		
19:30 – 19:55	*Marija P. Stanić, Aleksandar S. Cvetković, Tatjana V. Tomović*	Error Bounds for Some Quadrature Rules With Maximal Trigonometric Degree of Exactness
19:55 – 20:20	*Gradimir V. Milovanović, Dobrilo D. Tošić, Miloljub Albijanić*	Numerical Integration of Analytic Functions
20:20 – 20:45	*Gradimir V. Milovanović, Tomislav Igić, Novica Tončev*	Quadrature Formulae for Problems in Mechanics
20:45 – 21:10	*Gradimir V. Milovanović*, Dušan Joksimović	Some Properties of Boubaker Polynomials and Applications

19 September 2012 SYMPOSIUM: Mathematical Modelling CHAIR: Yiolanda Damianou (ROOM 6)		
19:35 – 20:05	*Maria Philippou, Yiolanda Damianou, George Kaoullas and Georgios C. Georgiou*	Stopping Times in Cessation Flows of Bingham Plastics with Slip at the Wall

19 September 2012 SESSION: Numerical Optimization and Applications CHAIR: Ana I Pereira and M. Fernanda Costa (ROOM 10)		
19:35 – 19:55	*Mario Sáenz Espinoza, Ana I. Pereira and José Gonçalves*	Optimization Methods for Hyper-redundant Robots' Inverse Kinematics in Biomedical Applications
19:55 – 20:15	*Gisela C.V. Ramadas and Edite M.G.P. Fernandes*	Solving Systems of Inequalities and Equalities by a Nonmonotone Hybrid Tabu Search Method
20:15 – 20:35	*Rita Vilaça and Ana Maria A.C. Rocha*	An Adaptive Penalty Method for DIRECT Algorithm in Engineering Optimization

19 September 2012 SESSION: Statistics and Modelling III CHAIR: (ROOM 11)		
19:35 – 20:05	*Bernd Schmeikal*	Hyperbolic Distributions In Social Science
20:05 – 20:35	*Lubos Strelec*	Some notes on robustification of the Jarque-Bera test

END OF THE 1ST DAY

20 September 2012 SESSION: INVITED SPEAKER CHAIR: Gerhard Wanner (ROOM 1)		
09:00 – 10:00	Ernst Hairer and Christophe J. Zbinden	Conjugate Symplectic B-Series

20 September 2012 SESSION: INVITED SPEAKER CHAIR: Ernst Hairer (ROOM 1)		
10:00 – 11:00	Gerhard Wanner	The Importance of Pappus for the Development of Mathematics
Coffee Break		

20 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: D. Zeidan (ROOM 1)		
11:30 – 12:00	**INVITED TALK:** ***Professor Gerald Warnecke*** Riemann problems for conservations laws with phase transitions	
12:00 – 12:30		
12:30 – 13:00	***Marèt Cloete and Francois Smit***	**Modeling of Generalized Newtonian Fluid Flow at a Fluid-porous Interface**
13:00 – 13:30	***D. A. Hoang, V. van Steijn, L. M. Portela, M. T. Kreutzer and C. R. Kleijn***	**Modeling of Low-Capillary Number Segmented Flows in Microchannels Using OpenFOAM**

20 September 2012 SESSION: Fifth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: L. Brugnano (ROOM 2)		
11:30 – 12:00	***E.Weinmueller***	**Numerical Approach to the Finite Hankel Transform Eigenfunctions**
12:00 – 12:30	***M.Trummer***	**Where Have All The Digits Gone?**
12:30 – 13:00	***P.Lima***	**Numerical Solution of Two-Dimensional Integral-Algebraic Systems Using Legendre Functions**
13:00 – 13:30	***T.Diogo***	**Numerical methods for nonlinear singular Volterra integral equations**

20 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. K. Gürlebeck (ROOM 3)		
11:30 – 12:00	***R. Lavicka,*** F. Brackx, H. De Schepper, V. Soucek	*Branching of monogenic polynomials*
12:00 – 12:30	***Malonek, H.R.,*** *G. Tomaz, I.Falcao*	*Pascal's triangle in Hypercomplex Function Theory*
12:30 – 13:00	***D. Pena Pena,*** *H. De Bie,F. Sommen*	*The generating function of the Clifford-Gegenbauer polynomials*
Lunch Break		

20 September 2012 SESSION: Numerical Analysis and Applied Mathematics CHAIR: Özgür Demir (ROOM 3)		
13:00 – 13:30	***Özgür Demir, Abdurrahman Sahin, Tamer Yilmaz***	**Investigation of Charge Weight and Shock Factor Effect on Non-linear Transient Structural Response of Rectangular Plates Subjected to Underwater Explosion (UNDEX) Shock Loading**

20 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 3 – Morning - IsoRelativity CHAIR: C. Corda (ROOM 4)	
9.00 – 10.00	Causal and Time Invariant Description of Superluminal Speeds within Physical Media via the Universal Isotopies of the Lorentz-Poincare' Symmetry Ruggero Maria Santilli
10.00 – 11-00	Experimental Confirmation of Santilli Iso- and Blue-Shift for Monochromatic Laser Light Gene Westy and Gino Amato
11.30 – 12.30	Anomalous Measurements of the Mossbauer Effect in Rotating Disks and Santilli IsoRed-BlueShift Alexander Kholmetskii
12.30 – 13.30	On the Cosmological Redshift Georgi Shpenkov

20 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Daniel Stein (ROOM: 5)		
11:30 – 12:15	*Otto E. Rössler*	Cryodynamics Can Solve the Energy Problem by Stabilizing ITER: A Prediction
12:15 – 13:00	*Renzo L. Ricca*	Tackling Fluid Tangles Complexity by Knot Polynomials
13:00 – 13:30	*Minos Axenides*	Nambu Mechanics as a Window to Deterministic Chaos
Lunch Break		

20 September 2012 SESSION: Generating Functions of Special Numbers and Their Applications CHAIR: M. Akan (ROOM 6)		
11:15 – 11:45	***A. Kim*** *and D. Kim*	A property of convolution sum for divisor functions
11:45 – 12:15	***D.Kruchinin, V.Kruchinin***	A Method for Obtaining Expressions for Polynomials Based on a Composition of Generating Functions
12:15 – 12:45	***I. C. Huang***	Algebraic Structures of Sequences of Numbers
12:45 – 13:15	***L. F. Ahmed***	On Two Applications of Herschel's Theorem
13:15 – 13:45	***N. Akgunes***	Analyzing special parameters over zero-divisor graphs
13:45 – 14:15	***O. Ozkan Kilic***	Neighborhoods of a class of analytic functions de_ned by using a di_erential equation
Lunch Break		

20 September 2012 SESSION: Structure-Preserving Numerical Methods for Differential Equations CHAIR: T. Matsuo (ROOM 7)		
11:30 – 12:00	*T. Matsuo*	An alternating discrete variational derivative method
12:00 – 12:30	*D. Furihata*	A new technique to design numerical schemes with weak nonlinearity based on discrete variational derivative method
12:30 – 13:00	*Y. Miyatake*	Energy conservative/dissipative H^1-Galerkin semi-discretizations for partial differential equations

20 September 2012 SESSION: Numerical Methods and Computational Procedures for Special Problems in Physics and Chemistry - The symposium is dedicated to Prof. Liviu Ixaru to celebrate his 70th birthday and give him the honour he deserves for his major scientific contributions CHAIR: B. Paternoster (ROOM 8)		
11:30 – 11:45	*B. Paternoster*	Introduction
11:45 – 12:15	*L. Gr. Ixaru,*	CP and EF methods for the Schrödinger equation. A comparison
12:15 – 12:35	*V. Ledoux*	On the use of CP methods for the numerical solution of the Schrödinger equation
12:35 – 12:55	*N. S. Scott, M.P. Scott*	Ixaru's extended frequency dependent quadrature rules for Slater integrals: parallel computation issues

20 September 2012 SESSION: Biomathematics VI CHAIR: Nico Stollenwerk (ROOM 9)		
11:30 – 12:00	*Maira Aguiar*	Describing dengue epidemics: insights from simple mechanistic models
12:00 – 12:30	*Filipe Rocha*	Understanding the effect of vector dynamics in epidemic models using center manifold analysis
12:30 – 13:00	*Ezio Venturino*	A meta-epidemic model with steady state demographics and migrations saturation

20 September 2012 SESSION: International Workshop on Computational Intelligence and Cyber Security CHAIRs: Prof. Jiankun Hu and Dr. Frank Jiang (ROOM 10)		
11:30 – 12:00	*Wencheng Yang, Kai Xi and Cai Li*	A Cancellable and Fuzzy Fingerprint Scheme for Mobile Computing Security
12:00 – 12:30	*Cai Li*	Double Layer Secure Sketch
12:30 – 13:00	*Quang Anh Tran, Minh Tuan Vu, Michael Frater, Frank Jiang*	Email User Ranking Based on Email Networks

20 September 2012 SESSION: Statistical Inference in Linear Models CHAIR: João Tiago Mexia (ROOM 11)		
11:30 – 12:00	*Roman Zmyślony*	Inference for the interclass correlation in familial data using small sample asymptotics
12:00 – 12:30	*Ricardo Covas*	Binary operations on Jordan algebras: an application to statistical inference in linear models
12:30 – 13:00	*Dina Salvador*	Structured families of stochastic symmetric matrices
Lunch Break		

20 September 2012 SESSION: Statistics and Modelling III CHAIR: (ROOM 12)		
11:30 – 12:00	*Christine Duller*	Model selection for logistic regression models
12:00 – 12:30	*Katharina Proksch*	Uniform confidence bands for multivariate inverse regression models
12:30 – 13:00	*Karl Moder*	A new and easy to use method to evaluate interaction in block designs
Lunch Break		

ICNAAM 2012
Kypriotis Hotels and Conference Center, Kos, Greece, 19-25 September 2012

20 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: P. Kosinski (ROOM 1)	
15:00 – 15:30	PLENARY LECTURE: *Professor Marwan Darwish* A review of Discretization Schemes for the Advection and Transient Terms with special application to Interface Problems
15:30 – 16:00	
16:00 – 16:30	KEYNOTE LECTURE: *Dr Djamel Lakehal* Computational Multi-Fluid Flow & Heat Transfer: A Review of the State-of-the-Art
16:30 – 17:00	
17:00 – 17:30	Coffee Break

20 September 2012 SESSION: Fifth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: K. In't Hout (ROOM 2)		
15:00 – 15:30	*G.Vainikko*	A Smooth Solution to Singular ODEs
15:30 – 16:00	*A.Y.Tsai*	Two-derivative Runge-Kutta methods for differential equations
16:00 – 16:30	*M.Rebelo*	An hybrid collocation method for fractional terminal value problems
16:30 – 17:00	*R.Pavani*	Numerical simulation of blow up oscillating solutions for nonlinear fourth order differential equations

20 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. H. R. Malonek (ROOM 3)		
15:00 – 15:30	***Smid, D.***	*A fifth order conformally invariant higher spin operator on the sphere*
15:30 – 16:00	***Sommen, F.***	*Cauchy-type Theorems on Surfaces*
16:00 – 16:30	***Soucek, V.,*** *D. Eelbode, P. Van Lancker*	*The Fueter theorem by representation theory*
16:30 – 17:00	***Krump, L.,*** *F. Brackx, H. De Schepper, V. Soucek*	*Selfdual 2–forms in dimension 4 and their Fischer decomposition*
17:00 – 17:30	**Coffee Break**	

20 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 4 Afternoon – Cosmology CHAIR: E. Trell (ROOM 4)	
15:30 – 16:30	**Experimental Dismissal of Universe Expansion, Expansion Acceleration, Big Bang, Space Expansion, Dark Matter and Dark Energy** **J. V. Kadeisvili, Russia**
16.40 – 17-30	**A new Renaissance in Cosmology** **John Pace**

20 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Barry Cooper (ROOM: 5)		
15:00 – 15:45	***Klaus Mainzer***	**The Cause of Complexity in Nature: An Analytical and Computational Approach**
15:45 – 16:30	***Glenda Eoyang***	**Human Systems Dynamics: Toward a Computational Model**
16:30 – 17:00	***Joost J. Joosten***	**Complexity, Universality and Intermediate Degrees**
17:00 – 17:30	**Coffee Break**	

20 September 2012 SESSION: Generating Functions of Special Numbers and Their Applications CHAIR: V. Kurt (ROOM 6)		
15:00 – 15:30	***M. Kilic***	Some important Physicalof Laminated Veneer Lumber (LVL) made from oriental beech and Lombardy polar
15:30 – 16:00	***O. Karaoglu***	A Study on Marangoni Convection by the Variational Iteration Method

20 September 2012 SESSION: Structure-Preserving Numerical Methods for Differential Equations CHAIR: Y. Sun (ROOM 7)		
15:00 – 15:30	*J. Zhang*	Energy-preserving Sinc collocation method for Klein-Gordon-Schrödinger equations
15:30 – 16:00	*H. Duan*	Comparison of two equivalent multisymplectic numerical methods for nonlinear wave equations
16:00 – 16:30	*X. Yin*	Solvability of the central box scheme for a kind of nonlinear partial differential equations
16:30 – 17:00	*L. Kong*	Conservative properties analysis of multi-symplectic integrator for the Schrödinger equation with wave operator
17:00 – 17:30	Coffee Break	

20 September 2012 SESSION: Numerical Methods and Computational Procedures for Special Problems in Physics and Chemistry - The symposium is dedicated to Prof. Liviu Ixaru to celebrate his 70th birthday and give him the honour he deserves for his major scientific contributions CHAIR: N.S. Scott (ROOM 8)		
15:00 – 15:20	*V. Melezhik*	Non-direct product discrete variable representation in some non-stationary quantum problems
15:20 – 15:40	*T. Vertse, R. G. Lovas, A. Rácz, P. Salamon*	The use of Ixaru's method in calculating poles of the S-matrix in strictly finite range potentials
15:40 – 16:00	*Y. Liu, Y. Zhang*	An Inverse Problem of Mass Resonator: Detection of Mass and Position of an Adsorbed Particle
16:00 – 16:20	*M. Van Daele and D. Hollevoet*	Exponentially-fitted methods and their stability functions
16:20 – 16:40	*L. Aceto, P. Ghelardoni, C. Magherini*	P-stable Boundary Value Methods for second order IVPs
16:40 – 17:00	*F. Diele, C.Marangi, S.Ragni*	Implicit - Symplectic Partitioned (IMSP) Runge-Kutta schemes for predator-prey dynamics
17:00 – 17:30	Coffee Break	

20 September 2012 SESSION: Biomathematics VI CHAIR: Ezio Venturino (ROOM 9)		
15:00 – 15:30	*Maira Aguiar*	Rich dynamics in multi-strain models: non-linear dynamics and deterministic chaos in dengue fever epidemiology
15:30 – 16:00	*Peyman Ghaffari*	Evolution of n-species Kimura/voter models towards criticality, a surrogate for general models of accidental pathogens
16:00 – 16:30	*Jean Clairambault*	Modelling targets for anticancer drug control optimisation in physiologically structured cell population models
16:30 – 17:00	*Chakib Jerry*	A viability analysis for a stock/price model

20 September 2012 SESSION: Numerical Functional Analysis CHAIR: Veli B. Shakhmurov (ROOM 10)		
15:00 – 15:30	*Fatih Sabahattin Tetikoğlu*	The Positivity of Differential Operator with Periodic Conditions
15:30 – 16:00	*Deniz Ağırseven*	Approximate Solutions of Delay Parabolic Equations with the Neumann Condition
16:00 – 16:30	*Yasar Sozen*	Reidemeister Torsion of Hitchin Representations of PSp2n(R)
16:30 – 17:00	*Fatma Songül Özesenli Tetikoğlu*	A Fourth Order of Accuracy Difference Scheme for the Bitsadze-Samarskii Type Nonlocal Boundary Value Problem

20 September 2012 SESSION: The 1st Symposium on Numerical Methods of Boundary Value Problems (BVPs): Analysis, Algorithms and Real World Applications CHAIR: Ali Sayfy & Suheil Khoury (ROOM 11)		
14:30 – 15:00	*Thomas Wunderli*	On Total Variation Flows with H^{-1} Penalty
15:00 – 15:30	*Suheil Khoury & Ali Sayfy*	A fourth-order adaptive collocation approach for the solution of a generalized Emden-Fowler type equations
15:30 – 16:00	*Elcin Yusufoglu and Ilkem Turhan*	Longitudinally Cracked Orthotropic Strip with Hinged Boundaries
16:00 – 16:30	*Mohmmad Ismail*	Finite Element Solution of Coupled Korteweg-de Vries Equations
16:30 – 17:00	*Ali Sayfy & Suheil Khoury*	A fourth-order spline collocation approach for the numerical solution of a generalized system of second-order boundary-value problems
Coffee Break		

20 September 2012 SESSION: Statistics and Modelling III CHAIR: (ROOM 12)		
15:00 – 15:30	*Lidia Z. Filus*	Multivariate "pseudo-distributions" as natural extension of the bivariate normal density pattern - Theory
15:30 – 16:00	*Jerzy K. Filus*	Multivariate "pseudo-distributions" as natural extension of the bivariate normal density pattern - Applications
16:00 – 16:30	*Harald Heinzl*	Quantitative Assessment of Scientific Quality
17:00 – 17:30	Coffee Break	

20 September 2012 SESSION: INVITED SPEAKER CHAIR: Peter Deuflhard (ROOM 1)		
17:30 – 18:30	John Butcher	Hopf algebras, B-series, order stars and order arrows

20 September 2012 SESSION: INVITED SPEAKER CHAIR: John Butcher (ROOM 1)		
18:30 – 19:30	Peter Deuflhard	Lady Windermere's Dual Fan and the Motion of her Knee

20 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: D. Lakehal (ROOM 1)		
19:35 – 20:05	*E. Ramos-Gómez, C. González-Rivera and M.A Ramírez-Argáez*	Mathematical Modeling of Fluid Flow in Aluminium Ladles for Degasification with Impeller - Injector
20:05 – 20:35	*Yanhai Lin, Liancun Zheng and Xinxin Zhang*	Marangoni Convection Flow and Heat Transfer in Pseudo-plastic Non-Newtonian Nanofluids with Radiation Effects and Heat Generation or Absorption Effects
20:35 – 21:05	*Maryam Ghaffari, Yu-Fen Chang, Alex C. Hoffmann and Boris Balakin*	CFD Modeling of PEPT Results of Particle Motion Trajectories in a Pipe over an Obstacle

20 September 2012 SESSION: Recent Advances and Current Research on the Difference Equations and its Applications CHAIR: Francisco Miranda (ROOM 2)		
19:35 – 20:05	***Francisco Miranda***	**Differential Inclusions and Optimization Problem on Time Scales**
20:05 – 20:35	***Kuniyoshi Abe, Gerard L. G. Sleijpen***	**A BiCGStab2 variant of the IDR(s) method for solving linear equations**
20:35 – 21:05	***Kenji Sato, Makoto Yano***	**A Simple Condition for Uniqueness of the Absolutely Continuous Ergodic Measure and Its Application to Economic Models**

20 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. B. Schmeikal (ROOM 3)		
19:35 – 20:05	***G. McClellan***	*Geometric Calculus-based Postulates for the Derivation and Extension of the Maxwell Equations*
20:05 – 20:35	***V. Abramov***	*Geometric Approach to Ghost Fields*
20:35 – 21:05	***D. Bryukhov***	*On Modified Quaternionic Analysis, Irrotational Velocity Fields and New Applications of the Riesz system in R3*

20 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Ping Yi (ROOM 4)		
19:35 – 20:05	***Ping Yi***	**On Models of Design Optimization with Bounded-butunknown Uncertainty**
20:05 – 20:35	***Ji-Ting Qu***	**A New Placement Optimization Method for Viscoelastic Dampers: Energy Dissipation Method**

20 September 2012 SESSION: Recent Developments in Modeling and Simulation for Partial Differential Equations (PDEs) CHAIR: Mohammad Siddique (ROOM 5)		
19:35 – 20:05	*Abir Alharbi*	A Solution to Neural Field Equations by a Recurrent Neural Network Method Name of the author
20:05 – 20:35	*A. A. Aderogba, M. Chapwanya and J. K. Djoko*	Travelling Wave Solution of the Kuramoto-Sivashinsky Equation: A Computational Study

20 September 2012 SESSION: Geometry of Kenmotsu Manifolds and Their Submanifolds CHAIR: Mohammad Siddique (ROOM 5)		
20:35 – 21:05	*Ram Shankar GUPTA*	Geometry of Lightlike Hypersurfaces of an Indefinite Cosymplectic Manifolds

20 September 2012 SESSION: Numerical Phenomena and Analysis of Fluid Flow in Joule-Heated Cavity of Low-Prandtl Number Fluid CHAIR: Zhang Xiaohui (ROOM 5)		
21:05 – 21:35	*Zhang Xiaohui, Zhang mingjie,Zhong Qigang*	Numerical Analyses of Fluid Flow in Joule-heated Cavity of low-Prandtl Number Fluid

20 September 2012 SESSION: Numerical Analysis of Irreversible Deformation, Micro- and Macro-Fracture of Isotropic and Anisotropic Materials under Shock Loading Conditions CHAIR: Alexander A. Lukyanov (ROOM 6)		
19:35 – 20:05	*Alexander A. Lukyanov*	Modelling the Shock Response of a Damageable Anisotropic Composite Material
20:05 – 20:35	*Vladimir M. Sadovskii and Oxana V. Sadovskaya*	Parallel Program Systems for Modeling Elastic-Plastic Waves in Structurally Inhomogeneous Materials

20 September 2012 SESSION: SEISMIC WAVEFORM ANALYSIS AND INVERSION PROBLEMS (SWAIP): OVERVIEW OF SGRAPH TOOLS AND APPLICATIONS CHAIR: Mohamed F. Abdelwahed (ROOM 6)		
20:35 – 21:05	*Mohamed F. Abdelwahed*	Solving Seismological Problems Using SGRAPH Program: I- Source parameters and hypocentral location
21:05 – 21:35	*Mohamed F. Abdelwahed*	Solving Seismological Problems Using SGRAPH Program: II- Waveform modeling

20 September 2012 SESSION: Numerical Solutions to Problems in Matrix Operations CHAIR: Petero Kwizera (ROOM 6)		
21:35 – 22:05	*Petero Kwizera*	Matrix Singular Value Decomposition to a Linear Combination of Rank One Partial Isometries

20 September 2012 SESSION: Multiscale methods and their application to the problems arising in complex system's modeling CHAIR: Eugene B. Postnikov (ROOM 7)		
19:35 – 20:05	*Eugene Postnikov*	Mean-field approach to diffusion processes with many scales of mobility
20:05 – 20:35	*Andrea Fernandez*	Sharp-interface models for concrete carbonation
20:35 – 21:05	*Markus Kettmann*	Heterogeneous Multiscale Methods for Penalty Methods in Multibody Dynamics

20 September 2012 SESSION: Numerical Methods and Computational Procedures for Special Problems in Physics and Chemistry - The symposium is dedicated to Prof. Liviu Ixaru to celebrate his 70th birthday and give him the honour he deserves for his major scientific contributions CHAIR: M. van Daele (ROOM 8)		
19:35 – 19:55	*F. Diele, C.Marangi, S.Ragni*	Exponential Runge-Kutta integrators for modelling predator-prey interactions
19:55 – 20:15	*B.Pace, F. Diele, C.Marangi*	Energy preservation in separable Hamiltonian systems by splitting schemes
20:15 – 20:35	*A. Cardone, B. Paternoster, G. Santomauro*	Exponential fitting quadrature rule for functional equations
20:35 – 20:55	*R. D'Ambrosio, B. Paternoster*	Diagonally implicit exponentially fitted Runge-Kutta methods with equation dependent coefficients
20:55 – 21:15	*D. Conte, B. Paternoster, G. Santomauro*	An exponential fitted quadrature rule over unbounded intervals

20 September 2012 SESSION: International Workshop on Computational Intelligence and Cyber Security CHAIRs: Prof. Jiankun Hu and Dr. Frank Jiang (ROOM 9)		
19:35 – 19:55	*Gideon Creech and Frank Jiang*	The Application of Extreme Learning Machines to the Network Intrusion Detection Problem
19:55 – 20:15	*Gideon Creech, and Frank Jiang*	Semantics based Multi-layered Networks for Spam Email Detection
20:15 – 20:35	*Iraj Fathirad, John Devlin, Frank Jiang*	Comparative Study of Key Exchange and Authentication Methods in Application, Transport and Network Level Security Mechanisms
20:35 – 20:55	*Cong Tuan Vu, Quang Anh Tran, Frank Jiang*	A Comparison of Two IPv4/IPv6 Transition Mechanisms – OpenVPN and IVI

20 September 2012 SESSION: Numerical Functional Analysis CHAIR: Yaşar Sözen (ROOM 10)		
19:35 – 20:35	Nese Nalbant	The Positivity of Differential Operator with Nonlocal Boundary Conditions
20:35 – 21:05	Muzaffer Akat	An Approximation of Stochastic Telegraph Equations
21:05 – 21:35	Zeynep Odemiş Özger and Faruk Özger	A First Order of Accuracy Stable Difference Scheme for Hyperbolic-Elliptic Equations
21:35 – 22:05	Johnny Henderson and Rodica Luca	Positive Solutions for Second-Order Multi-Point Discrete Boundary Value Problems

20 September 2012 SESSION: Statistical Inference in Linear Models CHAIR: Roman Zmyślony (ROOM 11)		
19:35 – 20:05	*Francisco Carvalho*	Commutative orthogonal block structure: orthogonal features
20:05 – 20:35	*João Tiago Mexia*	Models of symmetric stochastic matrices
20:35 – 21:05	*Célia Fernandes*	Joining models with stair nesting
21:05 – 21:35	*Célia Nunes*	One-way random effects ANOVA: an extension to samples with random size

20 September 2012 SESSION: The Numerical Analysis and Applied Mathematics in Geodynamics CHAIR: Bojing Zhu (ROOM 12)		
19:35 – 20:05	*Dongsheng Sun and Hongcai Wang and Yinsheng Ma and Chunjing Zhou*	Estimation of Co-seismic Stress Change of the 2008 Wenchuan Ms8.0 Earthquake
20:05 – 20:35	*Lu Gao and Lianjie Wang*	Laboratory Experiment of the Rock Anelastic Strain Recovery Compliances
20:35 – 21:05	*Qiao Yanchao and Tian Ye and Guo Ziqi and Shi Yaolin*	What is the Main Mechanism for the Yanshanian Magmatism?

END OF THE 2ND DAY

21 September 2012 SESSION: INVITED SPEAKER CHAIR: Christopher J. Marx (ROOM 1)		
09:00 – 10:00	Robert Beardmore	TBA

21 September 2012 SESSION: INVITED SPEAKER CHAIR: Prof. K. Gürlebeck (ROOM 1)		
10:00 – 11:00	D. Hildenbrand	Foundations of Geometric Algebra Computing
Coffee Break		

21 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: M. Darwish (ROOM 1)		
11:30 - 12:00	*J.M. Floryan and H.V.Moradi*	Grooved Surfaces for Laminar Drag Reduction
12:00 – 12:30	*J. Delgado-Álvárez, Marco A. Ramírez-Argáez and C. González-Rivera*	Mathematical Modeling of a Gas Jet Impinging on a Two Phase Bath
12:30 – 13:00	*R. Keslerová, K. Kozel and P. Louda*	Numerical Solution of Newtonian Fluids Flow through the Branching Channel
13:00 – 13:30	*Henrik Ström, Ebrahim Karimi Sibaki and Srdjan Sasic*	Numerical Simulations of the Interaction between a Settling Particle and a Rising Microbubble

21 September 2012 SESSION: Fifth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: G. Vainikko (ROOM 2)		
11:30 – 12:00	***P.Amodio***	**A finite difference Matlab code for the numerical solution of singular perturbation problems**
12:00 – 12:30	***R.D'Ambrosio***	**P-stable Nordsieck General Linear Methods for second order Ordinary Differential Equations**
12:30 – 13:00	***V.Finek***	**The construction of well-conditioned wavelet basis based on quadratic B-splines**
13:00 – 13:30	***A.Gorgey***	**Active and passive symmetrization of Runge-Kutta Lobatto IIIA methods**
Lunch Break		

21 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. V. Soucek (ROOM 3)		
11:30 – 12:00	***C. Cruz,*** *M. I. Falcao,* *H. R. Malonek*	*On the structure of generalized Appell sequences of paravector valued homogeneous monogenic polynomial*
12:00 – 12:30	***K. Gürlebeck***	*Polynomial Appell systems in the framework of φ-ψ hyperholomorphic functions*
12:30 – 13:00	***W. Sprößig***	*A retrospective on hypercomplex Pi-operators*

21 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 5 Morn ing – Superluminal Communications CHAIR: R. M. Santilli (ROOM 4)	
9.00 – 10.00	Physical Background and Limits of Superluminal Signal Transport Guenter Nimtz
10.00 – 11.00	Application of Faster than Light in Information Technology and in Media Communication Alexander Carôt
11.30 – 13.30	Actual Measurements of Superluminal Communications via Electromagnetic Waves propagating within Special Guides Guenter Nimtz and Alexander Carôt

21 September 2012 SESSION: Dynamical systems: a Framework for Robot Locomotion CHAIR: Dr. Carla M.A. Pinto and Dr. Cristina M.P. Santos (ROOM 5)		
11:30 – 12:00	*Mafalda Couto, Cristina Santos and José Machado*	Design and Modelling of a 3D Compliant Leg for Bioloid
12:00 – 12:30	*José Pontes and Cristina P. Santos*	Velocity Control of a Two DOFWalking System
12:30 – 13:00	*Carla M.A. Pinto*	Quadruped Robots' Modular Trajectories: Stability Issues
13:00 – 13:30	*Ana Filipa Duarte, Pedro Silva and Cristina Peixoto dos Santos*	Reinforcement Learning: Solving Two Case Studies
13:30 – 14:00	*Miguel Oliveira, Cristina P. Santos and Lino Costa*	Sensitivity Analysis of Multi-objective Optimization of CPG Parameters for Quadruped Robot Locomotion

21 September 2012 SESSION: 2nd Symposium on Analysis of Quantum Field Theory CHAIR: Ralf Hofmann (ROOM 6)		
11:30 – 12:00	*Carl Bender*	PT-Symmetric Quantum Systems
12:00 – 12:30	*Anthony Thomas*	Non-perturbative aspects of hadron structure in QCD.
12:30 – 13:00	*Carl Bender*	Discussion
13:00 – 13:30	*Anthony Thomas*	Discussion

21 September 2012 SESSION: Allelopathic Stimulatory Phytoplankton Model with Stochastic Perturbation CHAIR: Syed Abbas (ROOM 6)		
13:30 – 14:00	*Lakshman Mahto and Syed Abbas*	Existence and Uniqueness of Solution of Fractional Differential equations of Caputo Type
14:00 – 14:30	*Syed Abbasand Lakshman Mahto*	Existence of Almost Periodic Solution of a Model of Phytoplankton Allelopathy with Delay
14:30 – 15:00	*Jai Prakash Tripathi, Syed Abbas, Manoj Thakur*	Stability Analysis of Two Preys One Predator Model

21 September 2012 SESSION: Structure-Preserving Numerical Methods for Differential Equations CHAIR: D. Furihata (ROOM 7)		
11:30 – 12:00	*T. Yaguchi*	Application of the Lagrangian approach of the discrete gradient method to scleronomic holonomic systems
12:00 – 12:30	*W.Tang*	A new approach to construct Runge-Kutta type methods and geometric numerical integrators
12:30 – 13:00	*Y. Sun*	On an integrable discretisation of the Lotka-Volterra system
13:00 – 13:30	*R.Kozlov*	On conservative discretization of the Kepler problem

21 September 2012 SESSION: Biomathematics VI CHAIR: Ezio Venturino & Nico Stollenwerk (ROOM 8)		
11:30 – 12:00	*Roberto A. Kraenkel*	When Transients are Permanent: the Unusual Exclusion Patterns in Intraguild Predation
12:00 – 12:30	*Gabriel Andreguetto Maciel*	How Individual Response to Habitat Edges Affects Population Persistence and Spatial Spread
12:30 – 13:00	*F. Azevedo*	Competitive Release and Area Efects
13:00 – 13:30	*Urszula Skwara*	Applications of fractional calculus to epidemiological models
Lunch Break		
15:00 – 15:30	*Ezio Venturino*	A model for which toxic and non-toxic phytoplankton are indistinguishable by the zooplantkon
15:30 – 16:00	*Roberto Cavoretto*	Landmark-Based Image Registration using Gneiting's Compactly Supported Functions
16:00 – 16:30	*Nico Stollenwerk*	Parameter estimation and model comparison for stochastic epidemiological processes in a Bayesian framework

21 September 2012 SESSION: Mini symposium on symmetry methods and applications for differential equations CHAIR: Rita Tracinà (ROOM 9)		
11:15 – 11:35	*Maria Luz Gandarias, Maria Santos Bruzón, Maria Rosa*	Symmetries and nonlinear self-adjointness for a generalized Fisher equation
11:35 – 12:00	*Giampaolo Cicogna*	Symmetry properties and reduction procedures for ODE's
12:00 – 12:25	*Raseelo Joel Moitsheki*	Classical Lie point symmetry analysis and exact solutions for the two-dimensional fin problem
12:25 – 12:50	*Georgy I. Burde*	Alternative Sets of Multisoliton Solutions of Some Integrable KdV Type Equations via Direct Methods
12:50 – 13:10	*Maria Santos Bruzón, Maria Luz Gandarias, Jose-Carlos Camacho, José Ramírez*	Symmetry reductions for a generalized Dullin-Gottwald-Holm equation
13:10 – 13:30	*Rita Tracinà*	Nonlinear self-adjointness of a class of generalized diffusion equations
13:30 – 13:50	*Mariano Torrisi, Igor L. Freire*	On a Model for Aedes Aegypti
Lunch Break		

21 September 2012 SESSION: Analysis of Wave-Induced Response and Instability of Seabed CHAIR: Dr. M.B. Can Ulker (ROOM 10)		
11:30 – 12:00	*Ji-Sheng Zhang, Chi Zhang and Dong-Sheng Jeng*	Three-dimensional model for wave-induced dynamic pore pressure around monopile foundation
12:00 – 12:30	*Can Ulker*	Dynamic Pore Pressure Response of Two-Layer Seabed under Nonlinear Waves
12:30 – 13:00	*C. C. Liao and Dong-Sheng Jeng*	Dynamic soil response of poroelastic seabed to nonlinear water waves and uniform currents
13:00 – 13:30	*Can Ulker*	Instantaneous Liquefaction in a Multi-Layer Seabed under Nonlinear Progressive Waves

21 September 2012 SESSION: Statistical Inference in Linear Models CHAIR: Francisco Carvalho (ROOM 11)		
11:30 – 12:00	*Dário Ferreira*	Confidence regions for variance components using inducing pivot variables
12:00 – 12:30	*Miguel Fonseca*	Discriminant analysis in models with structured mean and covariance
12:30 – 13:00	*Paulo Ramos*	Study of the interactions in a three-way crossed classification model
13:00 – 13:30	*Sandra Ferreira*	Linear and Quadratic Sufficiency and Commutativity

21 September 2012 SESSION: The Latest Development in the Theory of the Homotopy Analysis Method and Its Applications CHAIR: Mohamad Hajji (ROOM 12)		
11:30 – 12:00	*Dali Xu, Zhiliang Lin and Shijun Liao*	On the quartet resonance of gravity waves in water of finite depth"
12:00 – 12:30	*Fathi M Allan and Mohamed A. Hajji*	On the similarity solution of nanofluid flow over a moving flat plate using the Homotopy analysis method
12:30 – 13:00	*Yinlong Zhao and Shijun Liao*	On the HAM-based Mathematica package BVPh for coupled nonlinear ODEs

21 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Ali Sanayei (ROOM: 12)		
13:00 – 14:00	*Otto E. Rössler* *Klaus Mainzer* *Minos Axenides*	Round Table: The History of "Chaos" and its Future

21 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: J.R. García-Cascales (ROOM 1)		
15:00 – 15:30	*N. Tofighi, A. Zainali and M. Yildiz*	Modelling of Bubble Rising by Smoothed Particle Hydrodynamics Method
15:30 – 16:00	*Vasily Novozhilov and Conor Byrne*	Lattice Boltzmann Modeling of Thermal Explosion in Dynamic Mixtures
16:00 – 16:30	*Giacomo Viccione, Vittorio Bovolin and Eugenio Pugliese Carratelli*	Simulating fluid-structure interaction with SPH
16:30 – 17:00	*M.S. Shadloo and M. Yildiz*	Simulation of Rayleigh-Taylor Instability by Smoothed Particle Hydrodynamics: Advantages and Limitations
17:00 – 17:30	Coffee Break	

21 September 2012 SESSION: Fifth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: E. Weinmueller (ROOM 2)		
15:00 – 15:30	*F.Iavernaro*	A parallel implementation of the Gauss method for ODEs
15:30 – 16:00	*K.In't Hout*	ADI schemes for multidimensional PDEs in finance
16:00 – 16:30	*C.Magherini*	Generalized Adams Methods for Fractional Differential Equations
16:30 – 17:00	*R.Quispel*	TBA

21 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. F. Sommen (ROOM 3)		
15:00 – 15:30	*F. Colombo,* I. *Sabadini, F.Sommen*	*An overview on the Inverse Fueter Mapping Theorem*
15:30 – 16:00	*I. Sabadini,* *D. Alpay, F. Colombo*	*Schur analysis in the slice hypercomplex setting*
16:00 – 16:30	*M. Ferreira*	*Complex dilations, shearings, and rotations*
16:30 – 17:00	*D. Legatiuk,* *K. Gürlebeck*	*On a special finite element based on holomorphic functions*
17:00 – 17:30	Coffee Break	

21 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 6 Afternoon – Measuring Santilli IsoRedShift CHAIR: A. K. Aringazin (ROOM 4)	
13.30 – 14.30	Ether propulsion requires surpassing the standard model Athanassios Nassikas
14.30 to Sunset	Actual Measurements on a beach of Santilli IsoRedShift of the Sun in the transition from the Zenith to the Horizon Via a Telescope and Avantes Wavelength Analyzer S. Moskaliuk, Mr. G. Amato and P. Murphy
At Dusk	Dinner offered by the Santilli Foundation to all participants of the 2012 Seminar Course on Hadronic Mechanics, Time and restaurant to be announced

21 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems Public Panel Discussion CHAIR: Markus Kirkilionis (ROOM: 5)		
15:00 – 17:00	*Barry Cooper* *Glenda Eoyang* *Klaus Mainzer* *Emily Shuckburgh* *Daniel Stein*	Public Panel Discussion
17:00 – 17:15	Symposium Photos	

21 September 2012 SESSION: 2nd Symposium on Distribution Theory, Estimation and Inference CHAIR: Carlos A. Coelho (ROOM 6)		
15:00 – 15:30	*Manuela Neves, Ivette Gomes, Fernanda Figueiredo, Dora Prata Gomes*	Modeling Extreme Events: Sample Fraction Adaptive Choice in Parameter Estimation
15:30 – 16:00	*Frederico Caeiro, M. Ivette Gomes*	A Reduced Bias Estimator of a "Scale" Second Order Parameter
16:00 – 16:30	*Ayana Mateus, Margarida Tomé*	Generalized Least Squares Method in Nonlinear Equations

21 September 2012 SESSION: Numerical Functional Analysis CHAIR: Yaşar Sözen (ROOM 7)		
15:00 – 15:30	Betul Topcu Hiçdurmaz	Stable Difference Schemes for the Fractional Schrödinger Differential Equation
15:30 – 16:00	Ali Ugur Sazaklıoglu	A Second Order of Accuracy Stable Implicit Difference Scheme for a Two-Phase Fluid Flow Model
16:00 – 16:30	Necmettin Aggez	Stable Difference Scheme for Nonlocal Boundary Value Hyperbolic Problems Involving Multi-Point and Integral Conditions
16:30 – 17:00	Okan Gercek	On the Numerical Solution of a Two Dimensional Elliptic-Parabolic Equation

21 September 2012 SESSION: Symposium on the Numerical Solution of Differential Equations and their Applications CHAIR: Z. Kalogiratou, Th. Monovasilis (ROOM 9)		
14:30 – 15:00	*Ioannis Th. Famelis, George Galanis and Dimitrios Triandafyllou*	On the Numerical Solution of a Boundary Value Problem which Rises in the Prediction of Meteorological Parameters
15:00 – 15:30	*D. Černá, Václav Finěk*	Adaptive solution of the biharmonic problem with shortly supported cubic spline-wavelets.
15:30 – 16:00	*E. González, M. J. Villena*	Stability Analysis for Spatial Attrition with n Forces
16:00 – 16:30	*Yoshio Komori, K. Burrage*	Multi-dimensional linear stability analysis of S-ROCK methods for Itô stochastic differential equations.
16:30 – 17:00	*Z. Kalogiratou, Th. Monovasilis, T.E.Simos*	Diagonally Implicit Symplectic Runge-Kutta methods with special properties.

21 September 2012 SESSION: 131 BE-SMART- BIOMETRY AND EXTREMES: STATISTICAL MODELLING AND R TECHNIQUES CHAIR: Teresa Oliveira (ROOM 10)		
15:00 – 15:30	*M. Fátima Brilhante, M. Ivette Gomes and Dinis D. Pestana*	A Non-Parametric Double-Bootstrap Method for an Adaptive MOP EVI-Estimation
15:30 – 16:00	*Clara Cordeiro and M.Manuela Neves*	How bootstrap can help in forecasting time series with more than one seasonal pattern
16:00 – 16:30	*M. R. Ramos, E. Carolino, T.A. Oliveira, M. Bicho*	Two-way MANCOVA: An Application to Public Health
16:30 – 17:00	*Oliveira A., Oliveira T.A. and Mejza, S.*	Joint Regression Analysis and AMMI model applied to oat improvement

21 September 2012 SESSION: MATHEMATICAL MODELING IN HYDROLOGY CHAIR: prof. Lucio UBERTINI (ROOM 11)		
15:00 – 15:15	***A. Petroselli***	**Convolution Of Linear System Using Geomorphological Watershed Information** ***S. Grimaldi A. Petroselli, F. Nardi***
15:15 – 15:30	***A. Petroselli***	**Empirical Solution of Green-Ampt Equation Using Soil Conservation Service – Curve Number Values** ***S. Grimaldi A. Petroselli, N. Romano***
15:30 – 15:45	***E. Ridolfi***	**An Entropy Method for Floodplain Monitoring Network Design** ***E. Ridolfi, K. Yan, L. Alfonso, G. Di Baldassarre, F. Napolitano, F. Russo, and Paul D. Bates***
15:45 – 16:00	***E. Ridolfi***	**A Comparison of Two Rainfall Disaggregation Models** ***V. Montesarchio, F. Napolitano, E. Ridolfi and L. Ubertini***
16:00 – 16:15	***F. Russo***	**Assessment Of An Adjustment Factor To Model Radar Range Dependent Error** ***S. Sebastianelli, F. Russo, F. Napolitano, and L. Baldini***
16.15 – 16:30	***M. Rianna***	**Soil Conservation Service Curve Number: How to take into account spatial and temporal variability** ***M. Rianna, D. Orlando, V. Montesarchio, F. Russo, F. Napolitano***
16:30 – 16:45	***C. Biscarini***	**LBM method for Roughness effect in open channel flows** ***S. Di Francesco, G. Falcucci, C. Biscarini, P. Manciola***
16:45 – 17:00	***L. Ubertini***	**Discussion and Conclusion**
17:00 – 17:30	**Coffee Break**	

21 September 2012 SESSION: The Latest Development in the Theory of the Homotopy Analysis Method and Its Applications CHAIR: Fathi Allan (ROOM 12)		
15:00 – 15:30	*Hang Xu, Tao Fan and Xiang-Cheng You*	Three-dimensional boundary-layer flow and heat transfer of a Cu-water nanofluid over a stretching surface
15:30 – 16:00	*Xiangcheng You and Hang Xu*	Application of Homotopy Analysis Method for Mechanical Model of Deepwater SCR Installation
16:00 – 16:30	*Li Zou, Wang Zhen Zong Zhi and Tian Shoufu*	A Study Of The Initial Guess In Homotopy Analysis Method
16:30 – 17:00	*Zeng Liu, Zhiliang Lin and Shijun Liao*	On The Dispersion Relation Of Nonlinear Wave Current Interaction By Means Of The HAM

21 September 2012 SESSION: INVITED SPEAKER CHAIR: Robert Beardmore (ROOM 1)		
17:30 – 18:30	Ivana Gudelj	TBA

21 September 2012 SESSION: INVITED SPEAKER CHAIR: Ivana Gudelj (ROOM 1)		
17:30 – 18:30	Christopher J. Marx	TBA

21 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: M. Yildiz (ROOM 1)		
19:35 – 20:05	*Shiva P. Pudasaini and Stephen A. Miller*	A Real Two-Phase Submarine Debris Flow and Tsunami
20:05 – 20:35	*Maryam Ghaffari, Anders Vestvik, Boris Balakin and Alex C. Hoffmann*	Deposition Capabilities of Turbulent Particle-laden Flow Passing an Obstacle Using Experiment and CFD
20:35 – 21:05	*Yuming Chen and Frederik Arbeiter*	Numerical Simulation on Gas-Cooled Closely-Packed Solid Specimens

21 September 2012 SESSION: Clifford Analysis and Applications CHAIR: Prof. W. Sprößig (ROOM 3)		
19:35 – 20:05	*B. Schmeikal*	*On Motion*
20:05 – 20:35	*L. Krump, T. Salac*	*Exactness of the generalised Dolbeault complex for k Dirac operators in the stable rank*
20:35 – 21:05	*S. Georgiev, J. Morais*	*An explicit formula for the monogenic Szegö kernel function on 3D spheroids*

21 September 2012 SESSION: 2nd Symposium on Analysis of Quantum Field Theory CHAIR: Ralf Hofmann (ROOM 5)		
19:35 – 20:05	*Mikhail Shifman*	Non-Abelian Strings in Supersymmetric Yang-Mills
20:05 – 20:35	*Mikhail Shifman*	Discussion
20:35 – 21:05	*Francesco Giacosa*	Thermodynamics of O(3)-Model in 2 D
21:05 – 21:35	*Francesco Giacosa*	Discussion

21 September 2012 SESSION: 2nd Symposium on Distribution Theory, Estimation and Inference CHAIR: Carlos A. Coelho (ROOM 6)		
19:35 – 20:05	*Miguel Felgueiras, Rui Santos*	Exploring Pareto Scale Mixtures
20:05 – 20:35	*Miguel Felgueiras, João Martins, Rui Santos*	Pseudo-Convex Mixtures
20:35 – 21:05	*Filipe J. Marques, Carlos A. Coelho*	The Multi-Sample Independence Test
21:05 – 21:35	*Carlos A. Coelho, Barry C. Arnold*	Instances of the Product of Independent Beta Random Variables and of the Meijer G and Fox H Functions with Finite Representations

21 September 2012 SESSION: Numerical Functional Analysis CHAIR: Rodica Luca (ROOM 7)		
19:35 – 20:35	Aida Sahmurova	Separable Convolution Equations Occuring in Atmospheric Dispersion of Pollutants
20:35 – 21:05	Veli B. Shakhmurov	Navier-Stokes Problems with Small Parameters in All Plane
21:05 – 21:35	Mehmet Ali Akturk	Weighted Markov Inequality on Several Intervals
21:35 – 22:05	Sema Akturk	The Structure of Fractional Spaces Generated by the Difference Operator on the Half Plane

21 September 2012 SESSION: Symposium (86) on the "Numerical Solution of Differential Equations and their Applications" CHAIR: Z. Kalogiratou, Th. Monovasilis (ROOM 9)		
19:35 – 20:05	*E. Pindza,* *K. C. Patidar*	Spectral method for pricing options in illiquid markets
20:05 – 20:35	*Th. Monovasilis,* *Z. Kalogiratou, T.E.Simos*	Exponentially Fitted Symplectic Runge-Kutta-Nyström methods

21 September 2012 SESSION: Fractional Calculus and Applications CHAIR: Manuel Duarte Ortigueira (ROOM 9)		
20.35 – 21:05	*Dorota Mozyrska*	Difference Fractional Linear Initial Value Problems
21:05 – 21:35	*Manuel Duarte Ortigueira*	Two-sided Discrete Fractional Derivatives and Systems

21 September 2012 SESSION: High Accuracy Solution of Ordinary and Partial Differential Equations CHAIR: Murli M. Gupta (ROOM 10)		
19:35 – 20:05	*D. Fishelov, M. Ben-Artzi and J-P. Croisille*	Fourth-order Convergence of a Compact Scheme for the One-dimensional Biharmonic Equation
20:05 – 20:35	*Bill Spotz*	High Order Finite Difference Methods for Forward and Inverse Acoustic Problems
20:35 – 21:05	*Jiten C Kalita and Murli M Gupta*	Oscillatory Flow Past an Inclined Square Cylinder at Low Reynolds Numbers

21 September 2012 SESSION: Statistical Inference in Linear Models CHAIR: Ricardo Covas (ROOM 11)		
19:35 – 20:05	*Cristina Andrade*	Statistical coupling between winter cold days / warm nights in Europe and the underlying atmospheric flow
20:05 – 20:35	*Aníbal Areia*	Transversal analysis in matched series of studies

21 September 2012 SESSION: The Latest Development in the Theory of the Homotopy Analysis Method and Its Applications CHAIR: Dali Xu (ROOM 12)		
19:35 – 20:05	*Youssef El-Khatib,*	A Homotopy Analysis Method For The Option Pricing PDE In Illiquid Markets With Jumps
20:05 – 20:35	*Mohamed A. Hajji and Fathi M Allan*	Solving Non Linear Boundary Value Problems Using The Homotopy Analysis Method

21 September 2012 SESSION: Approximation, Scientific Computation and Applications “ASCA-2012" CHAIR: Gradimir V. Milovanović (ROOM 12)		
20:35 – 21:00	*Roberto Cavoretto*	A Unified Version of Efficient Partition of Unity Algorithms for Meshless Interpolation

END OF THE 3RD DAY

22 September 2012 SESSION: INVITED SPEAKER CHAIR: Jesus Maria Sanz Serna (ROOM 1)		
09:00 – 10:00	Luigi Brugnano	Geometric Integration by Playing with Matrices

22 September 2012 SESSION: INVITED SPEAKER CHAIR: Luigi Brugnano (ROOM 1)		
10:00 – 11:00	Jesus Maria Sanz Serna	A New Approach to High-Order Averaging

22 September 2012 SESSION: INVITED SPEAKER CHAIR: Luigi Brugnano (ROOM 1)		
11:00 – 12:00	Tobias Jahnke	Convergence of Piecewise Deterministic Processes Modeling Two-scale Reaction Networks

22 September 2012	
12:30	Photo of the Conference

22 September 2011
13:00 **Excursion**

22 September 2011

20:30

Central Dinner
(Room: Hippocrates of the Kipriotis International Convention Center – Level 1)

- Introduction by Professor Dr. Theodore E. Simos
- Honouring Professor Dr. Gerhard Wanner on the occasion of his 70th birthday. Introduction by Prof. Dr. John Butcher, Prof. Dr. Ernst Hairer and Prof. Dr. Jeff Cash
- Presentation of the Honorary Fellowship Awards of the European Society of Computational Methods in Sciences, Engineering and Technology
- Dinner

END OF THE 4TH DAY

23 September 2012 SESSION: INVITED SPEAKER CHAIR: Alexander Ostermann (ROOM 1)		
09:00 – 10:00	F. Castella, Ph. Chartier, F. Méhats and A. Murua	Stroboscopic Averaging in Banach Spaces: Application to NLS

23 September 2012 SESSION: INVITED SPEAKER CHAIR: Philippe Chartier (ROOM 1)		
10:00 – 11:00	Alexander Ostermann	Strang splitting for partial differential equations
Coffee Break		

23 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: J.M. Floryan (ROOM 1)		
11:30 - 12:00	*E. Romenski*	Hyperbolic Systems of Conservation Laws for Compressible Multiphase Flows Based on Thermodynamically Compatible Systems Theory
12:00 – 12:30	*D. Zeidan, A. Slaouti and R. Touma*	Compressible Gas-Solid Mixture Conservation Laws Simulations
12:30 – 13:00	*S. Schwarz and J. Fröhlich*	Representation of Deformable Bubbles by Analytically Defined Shapes in an Immersed Boundary Method

23 September 2012 SESSION: Memristor-Based Neuromorphic Circuits and Unconventional Computing CHAIR: Victor Erokhin (ROOM 3)		
11:30 – 11:45	*Victor Erokhin*	Memristor-based neuromorphic circuits and unconventional computing. Preface.
11:45 – 12:15	*Tatiana Berzina, Konstantin Gorshkov and Victor Erokhin*	Chains of Organic Memristive Devices: Cross-Talk of Elements
12:15 – 13:00	*V. Beiu, M. Calame, G. Cuniberti, C. Gamrat, Z. Konkoli, D. Vuillaume, G. Wendin, and S. Yitzchaik*	Aspects of Computing with Locally Connected Networks
13:00 – 13:30	*Gerard Howard, Larry Bull, Ben de Lacy Costello and Andrew Adamatzky*	Creating Unorganised Machines from Memristors

23 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 7 – Morning - Hadronic Chemistry CHAIR: C. Corda (ROOM 4)	
9.00 – 10.00	Structural Insufficiencies of Quantum Chemistry and their Apparent Resolution via the Covering Hadronic Chemistry R. M. Santilli
10.00 – 11-00	Studies on Santilli-Shillady model of the hydrogen molecule Ascar Aringazin
11.30 – 12.30	Exact Solution of Santilli-Shilady's Three-Body Hydrogen Molecule Raul Perez-Enriquez
12.30 – 13.30	Hadronic Chemistry Applied to Hydrogen and Water Molecules Vijay Tangde

23 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Ivan Zelinka (ROOM: 5)		
11:30 – 12:15	***Markus Kirkilionis***	Structures and Rules: Complex Systems as a Combination of Relations and Agent-Based Modeling
12:15 – 12:50	***Natalja Strelkowa***	Stochastic Oscillatory Dynamics of Generalized Repressilators
Lunch Break		

23 September 2012 SESSION: Helix Fitting by a Total Least Squares Method CHAIR: Norio Matsushima and Purevjav Enkhbayar (ROOM 6)		
11:30 – 12:00	*Purevjav Enkhbayar*	HELFIT: Algorithm and Applications
12:00 – 12:30	*Shintaro Takastuka*	Spectrum Analysis for Non-uniform Sampling based on Least Squares Fitting a Sinusoid
12:30 – 13:00	*Norio Matsushima*	Structural Features of Helical Secondary Structures and Leucine-Rich Repeat Superhelix in Proteins as Revealed by HELFIT Analyses

23 September 2012 SESSION: Recent Developments in Hilbert Space Tools and Methodology for Scientific Computing I CHAIR: Metin Demiralp (ROOM 7)		
11:30 – 12:00	*Metin Demiralp*	Opening a new era for solving ODEs: Probabilistic Evolution Approach (PEA), (Lecture based on preface)
12:00 – 12:30	*Cosar Gozukirmizi*	Space Extension Possibilities for Probabilistic Evolution with Multinomial Right Hand Side Functions
12:30 – 13:00	*Ercan Gurvit, N.Abdulbaki Baykara*	Multinomialization of the Classical Three Body Problem Before Applying Probabilistic Evolution Approach
13:00 – 13:30	*Burcu Tunga, Metin Demiralp*	Probabilistic Evolutions in Classical Dynamics: Conicalization and Block Triangularization of Lennard-Jones Systems
Lunch Break		

23 September 2012 SESSION: 67 (Hamilton-Jacobi Equations Arising from Optimal Control Problems and Differential Games: Analysis, Numerical Methods and Applications) CHAIR: Varvara Turova (ROOM 8)		
11:30 – 12:00	*Sourabh Bhattacharya, Tamer Basar, Naira Hovakimyan*	Game-Theoretic Analysis of a Visibility Based Pursuit-Evasion Game in the Presence of a Circular Obstacle
12:00 – 12:30	*Marianna Troeva*	Existence of Equilibrium Point for Noncooperative Differential Game in Banach Space
12:30 – 13:00	*Martin Brokate, Mukhayo Rasulova*	The Cauchy Problem for BBGKY Hierarchy of Quantum Kinetic Equations with Coulomb Potential
13:00 – 13:30	*Nikolai Botkin, Varvara Turova*	Application of Dynamic Programming Approach to Aircraft Take-Off in a Windshear
Lunch Break		

23 September 2012 SESSION: FIRST SYMPOSIUM ON COMPUTER SCIENCE AND APPLIED MATHEMATICS (CSAM 2012) CHAIR: Armagan Elibol (ROOM 9)		
11:30 – 12:00	*Armagan Elibol, Nuno Gracias and Rafael Garcia*	Reducing the optimisation effort in batch mosaicing

23 September 2012 SESSION: Mathematical optimization in modern medicine Symposium CHAIR: Dr. Flavius PATER, Dr. Med. Dr. Șerban ROȘU (ROOM 10)		
11:30 – 12:00	*F.PATER*	A Multiplier Algebra Representation with Application to Harmonic Signal Models
12:00 – 12:30	*M. TOTH-TASCAU, L. RUSU, F. BALANEAN, F. PATER, C. TOADER-PASTI*	Meshing Influence on Numerical Analysis of Ulna Bone
12:30 – 13:00	*M. TOTH-TASCAU, D. I. STOIA, C. VIGARU, O. PASCA*	Influence of the Surface Area Approximation on Plantar Arch Index Calculus

23 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: E. Romenski (ROOM 1)		
15:00 – 15:30	*Princia Anandan, Florinda Schembri and Maide Bucolo*	Computational Modeling of Droplet Based Logic Circuits
15:30 – 16:00	*Tomas Neustupa*	On the Stokes Operator Associated With the Flow Through a Cascade of Profiles
16:00 – 16:30	*Piotr Maciol, Leszek Gotfryd and Andrzej Maciol*	Knowledge Based System for Runtime Controlling of Multiscale Model of Ion-Exchange Solvent Extraction
16:30 – 17:00	*Rukiye Kara and Mine Caglar*	The Energy Spectrum for Stochastic Eddies with Gamma Distribution

23 September 2012 SESSION: State of the Art of Modeling and Numerical Analysis for Design, Determining the Performances and Controls of Wind Turbines CHAIR: Alexandru Dumitrache Florin Frunzulica (ROOM 2)		
15:00 – 15:30	*Diana Petrila* and *Nicolae Muntean*	Simulation and Experiment of a Fuzzy Logic Based MPPT Controller for a Small Wind Turbine System
15:30 – 16:00	*Andreea Bobonea*	Unsteady Computational Simulation for Active Aerodynamic Control of a Horizontal Axis Wind Turbine
16:00 – 16:30	*Sorin Ilin, Horia Dumitrescu, Vladimir Cardos, Alexandru Dumitrache*	A Free Wake Method for Performance Prediction of VAWT
16:30 – 17:00	Alexandru Dumitrache, H Dumitrescu	An Aeroelastic model for Horizontal Axis Wind Turbines
17:00 – 17:30	Coffee Break	

23 September 2012 SESSION: Memristor-Based Neuromorphic Circuits and Unconventional Computing CHAIR: Victor Erokhin (ROOM 3)		
15:00 – 16:00	*Giuseppe Tarabella, Nicola Coppedè, Roberto Mosca, Fabio Cicoira and Salvatore Iannotta*	Organic Electrochemical Transistors operating with Electrolytes of Increasing Complexity for (Bio)sensing
16:00 – 16:30	*O.Bogomolova, J.Boeva, V.Sereyev, D.Godovsky*	Memristors based on Polyaniline-Nafion interpolyelectrolyte complexes
16:30 – 17:00	*Anteo Smerieri, François Duport, Yvan Paquot, Marc Haelterman, Benjamin Schrauwen and Serge Massar*	Towards Fully Analog Hardware Reservoir Computing For Speech Recognition
17:00 – 17:30	Coffee Break	

23 September 2012 – Symposium # 50 Seminar Course on Hadronic mechanics and Chemistry SESSION: 8 – Afternoon = Hadronic Chemistry CHAIR: A. Kholmetskii (ROOM 4)	
15.30 – 16.30	Implications of Santilli's IsoRedShift Measurements for Gamma-Ray Burst Observed by SWIFT Satellite Herman J. Mosquera Cuesta
16.30 – 17.30	On the Geno-GPITT Framework: Spatially Uniform Systems and Geno-nonequilibrium Thermodynamic Time's Arrows Anil Bhalekar
17.30 – 18.30	Electrically bound quantum particles and Pure Bound Field Theory: precise physics of simple atoms and new bound state of the proton and electron Alexander Kholmetskii

23 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Glenda Eoyang (ROOM: 5)		
15:00 – 15:45	*Emily F. Shuckburgh*	Mapping Unstable Manifolds Using Drifters/Floats in a Southern Ocean Field Campaign
15:45 – 16:30	*Ivan Zelinka*	Controlling Complexity
16:30 – 16:55	*Felipe Marcel Neves*	Self-organization in the Movement Activity of Social Insects (Hymenoptera: Formicidae)
17:00 – 17:30	Coffee Break	

23 September 2012 SESSION: Computational methods in actuarial and financial risk evaluations, Part I CHAIR: R. Gatto (ROOM 6)		
15:00 – 15:45	*Pablo Padilla Longoria*	A Minimum-Entropy-Production Criterion to compare Credit Risk Models
15:50 – 16:35	*Riccardo Gatto*	Saddlepoint Approximations to Distributions and to Measures of Risk of Aggregate Losses
16:40 – 17:10	*Benjamin Baumgartner*	Measures of Risk for the Classical Risk Process using Saddlepoint Approximations

23 September 2012 SESSION:Recent Developments in Hilbert Space Tools and Methodology for Scientific Computing II CHAIR: Metin Demiralp (ROOM 7)		
15:00 – 15:30	*Ayla Okan, N.Abdulbaki Baykara, Metin Demiralp*	Fluctuation Suppression to Optimize Initial Data to Increase the Quality of Truncation Approximants in Probabilistic Evolution Approach for ODEs: Basic Philosophy
15:30 – 16:00	*Zeynep Gundogar, N. Abdulbaki Baykara*	Probabilistic Evolution Approach to ODEs with Laurent Series Expandable Descriptive Functions
16:00 – 16:30	*Fatih Hunutlu N. Abdulbaki Baykara*	Unidirectional Semi-Analytic Continuation in the Probabilistic Evolution Approach to Van der Pol Equation
16:30 – 17:00	*Berfin Kalay, Metin Demiralp*	Fundamental Elements of Vector Enhanced Multivariance Product Representation

23 September 2012 SESSION: Distance Functions and Mathematical Models in Computer Science CHAIR: Salvador Romaguera / Manuel Sanchis (ROOM 8)		
15:00 – 15:30	*Josefa Marín*	Partial Quasi-Metric Completeness and Caristi's Type Mappings
15:30 – 16:00	*Josefa Marín*	Submetrizable Yoneda Complete Structures for a Metric Dcpo
16:00 – 16:30	*Michel Schellekens*	*MOQA* Min-Max Heapify: A Randomness Preserving Algorithm
16:30 – 17:00	*Francisco Castro-Company*	Some Classes of t-norms and Fuzzy Metric Spaces

23 September 2012 SYMPOSIUM: Dynamics of Complex Systems & Networks: Modelling, Computational Analysis and Control CHAIR: Constantinos Siettos (ROOM 9)		
15:00 – 15:25	*Andreas Reppas and G. Lawyer*	Low K-Shells Identify Bridge Elements Critical to DiseaseFlow in Small-World Networks
15:25 – 15:50	*Michail E. Kavousanakis, Lucia Russo, Francesco Saverio Marra and Constantinos Siettos*	Systematic Bifurcation Analysis of a Planar Diffusion FlameModel with Radiative Heat Losses
15:50 – 16:15	*Konstantinos G. Spiliotis, Hari Radhakrishnan and George C. Georgiou*	Randomness Switches the Dynamics in a Biophysical Model for Parkinson Disease
16:15 – 16:40	*Constantinos Siettos*	A Computational Approach for Approximating Center Manifolds of Black-Box Simulators

23 September 2012 SESSION: Mathematical optimization in modern medicine Symposium CHAIR: Dr. Flavius PATER, Dr. Med. Dr. Șerban ROȘU (ROOM 10)		
15:00 – 15:30	*A. POGOREVICI, A. JURATONI and O. BUNDAU*	Hopf Bifurcations Analysis for a Mathematical Model of a Biomedical Process
15:30 – 16:00	*A. POGOREVICI, A. JURATONI and O. BUNDAU*	Mathematical Modeling and Analysis of a Cardiovascular System
16:00 – 16:30	*M. KREPELKA and M. TOTH-TAȘCĂU*	Optimization of Acetabular Component Orientation using DOE
16:30 – 17:00	*M. BOLDEA and F. SALA*	Bifactorial Model for the Assessment of Agricultural Yield and Economic Efficiency of Fertilization

23 September 2012 SESSION: 2nd Symposium on Analysis of Quantum Field Theory CHAIR: Mikhail Shifman (ROOM 11)		
15:00 – 15:30	*H.M. Fried and T. Grandou, Y. Gabellini, Y-M Sheu*	A New, Analytic, Non-Perturbative, Gauge-Invariant Formulation of Realistic QCD
15:30 – 16:00	*T. Grandou*	Non-Perturbative QCD Seen From the Property of Effective Locality
16:00 – 16:30	*H.M. Fried*	Discussion
16:30 – 17:00	*T. Grandou*	Discussion

23 September 2012 SESSION: INVITED SPEAKER CHAIR: Christian Lubich (ROOM 1)		
17:30 – 18:30	Abdulle Assyr	Explicit Stabilized Integration of Stiff Determinisitic or Stochastic Problems

23 September 2012 SESSION: INVITED SPEAKER CHAIR: Abdulle Assyr (ROOM 1)		
18:30 – 19:30	Christian Lubich	Backward difference time discretization of parabolic differential equations on evolving surfaces

23 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: D. Zeidan (ROOM 1)		
19:35 – 20:05	*Oana Marcu and Adrian Lungu*	Numerical Investigation of the Flow around the KVLCC2 Hull in Static Drift Motion
20:05 – 20:35	*K. El Wassifi, A. Ouahsine, H. Smaoui, R. Khiri and P. Sergent*	Numerical Modeling and Parameters Identification of Overland and Channel Flows in Watersheds
20:35 – 21:05	*Oana Marcu and Dan Constantin Obreja*	RANS Simulation of the Planar Motion Mechanism Tests for a VLCC Hull

23 September 2012 SESSION: State of the Art of Modeling and Numerical Analysis for Design, Determining the Performances and Controls of Wind Turbines CHAIR: Alexandru Dumitrache Florin Frunzulica (ROOM 2)		
19:35 – 20:05	*H. Dumitrescu*[**], *F. Frunzulica*[*], and *V. Cardos*	Physical Mechanism of Rotational Stall for HAWTs
20:05 – 20:35	*Aurelian Crăciunescu, Claudia Laurenţa Popescu* and *Mihai Octavian Popescu*	A Complementary Review of Maximum Power Point Tracking Methods for Wind Generators
20:35 – 21:05	*Victor Pricop, Mihai L. Niculescu, , Marius G. Cojocaru and Dorin Barsan*	Design, analysis and testing of small, affordable HAWT rotors
21:05 – 21:35	*F. Frunzulica, H. Dumitrescu* and *V. Cardos*	Modeling Stall-Delay using corrected BEM

23 September 2012 SESSION: Memristor-Based Neuromorphic Circuits and Unconventional Computing CHAIR: Victor Erokhin (ROOM 3)		
19:35 – 20:05	*Ella Gale, Ben de Lacy Costello and Andrew Adamatzky*	Observation And Characterization Of Memristor Current Spikes And Their Application To Neuromorphic Computation
20:05 – 21:05	*S. Iannotta, V. Sorokin, and V. Erokhin*	Round Table and Conclusions

23 September 2012 SESSION: Shape Preserving Splines and Applications CHAIR: Mridula Dube (ROOM 5)		
19:35 – 20:05	*Xuli Han*	A Monotonicity Preserving Local Interpolation Method
20:05 – 20:35	*Peter Massopust*	Splines of Complex Order: An Introduction
20:35 – 21:05	*Mridula Dube and Preeti Tiwari*	Convexity Preserving C^2 Rational Quadratic Trigonometric Spline

23 September 2012 SESSION: Computational methods in actuarial and financial risk evaluations, Part II CHAIR: R. Gatto (ROOM 6)		
19:35 – 20:20	*Jeffrey Collamore*	An Importance Sampling Algorithm for Estimating Extremes of Perpetuity Sequences
20:25 – 21:10	*Mogens Bladt*	Phase-Type Distributions and heavy tails in Risk Theory

23 September 2012 SESSION: Distance Functions and Mathematical Models in Computer Science CHAIR: Michel Schellekens (ROOM 8)		
19:35 – 20:05	*Francisco-Castro Company*	The Bicompletion of Intuitionistic Fuzzy Quasi-Metric Spaces
20:05 – 20:35	*Manuel Sanchis*	A Note on the Hausdorff *KM*-Fuzzy Metric
20:35 – 21:05	*Salvador Romaguera*	A Quantative Model for the Upper and Lower Hausdorff Distance of a Metric Space

23 September 2012 SESSION: Mathematical optimization in modern medicine Symposium CHAIR: Dr. Flavius PATER, Dr. Med. Dr. Șerban ROȘU (ROOM 10)		
19:35 – 20:05	*I. SAMFIRA, M. BOLDEA and C. POPESCU*	Statistic-Mathematical Interpretation of Some Assessment Parameters of the Grassland Ecosystem According to Soil Characteristics

23 September 2012 SESSION: 2nd Symposium on Analysis of Quantum Field Theory CHAIR: Francesco Giacosa (ROOM 11)		
19:35 – 20:05	*Richard A. Battye and* *Mareike Haberichter*	Classically Spinning and Isospinning Solitons
20:05 – 20:35	*Mareike Haberichter*	Discussion

END OF THE 5TH DAY

24 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: F. Smit (ROOM 1)		
09:00 – 09:30	*S.C.P. Cheung, G.H. Yeoh and J.Y. Tu*	Modelling Isothermal Bubbly-cap Flows Using Two-group Averaged Bubble Number Density Approach
09:30 – 10:00	*Botong Li, Liancun Zheng, Yanhai Lin and Xinxin Zhang*	Numerical Investigation on Heat Transfer in Power-law Fluids with Variable Thermal Diffusivity in the Presence of Viscous Dissipation and Radiation
10:00 – 10:30	*Herbert Obame Mve, Romuald Rullière, Rémi Goulet and Philippe Haberschill*	Numerical and Experimental Analysis of a Flow Confined by a Wire Screen

24 September 2012 SESSION: Metaheuristic and Numerical Analysis CHAIR: Gebrail Bekdas (ROOM 2)		
09:00 – 09:30	*Gebrail Bekdas and Sinan Melih Nigdeli*	Metaheuristic Algorithms in Structural Dynamics: An Application of Tuned Mass Damper Optimization
09:30 – 10:00	*Sinan Melih Nigdeli and Gebrail Bekdas*	Investigation of Earthquake Factor for Optimum Tuned Mass Dampers
10:00 – 10:30	*Hasan Omur Ozer and Nurkan Yagız*	Dynamic Absorber Design for Experimental Two Storey Building Model

24 September 2012 SESSION: Applied and Numerical Mathematics II CHAIR: Shihchung Chiang (ROOM 3)		
09:00 – 09:30	*R. Guirardello*	A Variational Formulation for the Diffusion Equation
09:30 – 10:00	*Shihchung Chiang and Wei-Chun Wu*	Issues of One Kind of Integro-Differential Equations
10:00 – 10:30	*Ikuo Saitoh*	A Method of Plaiting Hair
10:30 – 11:00	*J.C. Nacher and T.Ochiai*	Data Analysis Unveils a New Stylized Fact in Foreign Currency Markets
Coffee Break		

24 September 2012 – Symposium # 50 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 8 – Morning = Intermediate Nuclear Fusions CHAIR: R. M. Santilli (ROOM 4)	
9.00 – 10.00	Theoretical studies on Santilli's intermediate nuclear fusion without radiations Wei Cai
10.00 – 11-00	Experimental Verification of Santilli's Intermediate Controlled Nuclear Fusions Without Radiations Leong Ying
11.30 – 12.30	Kinetic Advantage of Controlled Intermediate Nuclear Fusion Xiaoming Guo
12.30 – 13.30	World Economy Crisis, New Energy Technology and CINF in China Daxi Li

24 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Emily Shuckburgh (ROOM: 5)		
09:00 – 09:30	*Tom Barlow*	Hidden Quantum Markov Models with One Qubit
09:30 – 10:05	*Vic Law*	3-Dimensional (Orthogonal) Structural Complexity of Time-Series Data Using Low Order Moment Analysis
10:05 – 10:30	*Lucia V. Gambuzza*	Emulating Fire Propagation by Using Cellular Nonlinear Networks
Coffee Break		

24 September 2012 SESSION: Statistics and Modelling III &Fractal Geometry, Quantization Dimension and Related Topics CHAIR: (ROOM 6)		
09:00 – 09:30	*Peter Massopust*	Fractal Interpolation Functions Generated by a Class of Bilinear Mappings and their Box Dimensions
09:30 – 10:00	*Mokhtar Konsowa*	Commute Times of Random Walks on Trees
10:00 – 10:30	*Loredana Madalina Ioana*	The relation between the attractors of IIFSs and the sets of type $\mathcal {A}$
Coffee Break		

24 September 2012 SESSION: Recent Developments in Hilbert Space Tools and Methodology for Scientific Computing III CHAIR: Metin Demiralp (ROOM 7)		
09:00 – 09:30	*Derya Bodur, Metin Demiralp*	A Perturbative Approach to High Dimensional Model Representation (HDMR) Under Nonproduct Type Weight and Over Orthogonal Geometry
09:30 – 10:00	*Evrim Korkmaz Ozay*	A New Multiway Array Decomposition via Enhanced Multivariance Product Representation
10:00 – 10:30	*Kemal Ozen*	Green's Function To The Forced Duffing Equation Involving Nonlocal Integral Conditions By Green's Functional Concept

24 September 2012 SESSION: SCLIT – Symposium on Computer Languages, Implementations and Tools CHAIR: Dr. Zoran Budimac (ROOM 8)		
09:00 – 09:20	*Dániel Leskó, Máté Tejfel*	Testing framework for embedded languages
09:20 – 09:40	*Hemang Mehta, Balaji S J, Janakiram D*	A g++ Extension for Supporting Nontrivial Designated Initializers
09:40 – 10:00	*Gergely Dévai, Zoltán Gera, Zoltán Kelemen*	Language Abstractions for Low Level Optimization Techniques
10:00 – 10:20	*Jakub Kroustek, Dušan Kolář*	Object-File-Format Description Language and Its Usage in Retargetable Decompilation

24 September 2012 SESSION: Boundary value problems and integral equations with applications CHAIR: A. V. Setukha (ROOM 9)		
09:00 – 09:30	*Gleb V. Ryzhakov*	On the Convergence of a some Numerical Method for a Hypersingular Integral Equation
09:30 – 10:00	*A.V. Setukha*	**The singular integral equation method in 3-D boundary value problems and its applications**
10:00 – 10:30	*Andrey Aparinov*	**Efficient vortex method for numerical solution of boundary value problems in aerodynamics**
10:30 – 11:00	*SASAMOTO Akira and P. A. Krutitskii*	**Integral representation of voltage in half-plane conductor with crack from surface by D.C. potential difference method**

24 September 2012 SESSION: Sequence spaces, Summability and Applications CHAIR: Aasma, Ants (ROOM 10)		
09:00 – 09:30	*Savas, Ekrem*	**λ– Statistical Convergence in Intuitionistic Fuzzy 2– Normed Space**
09:30 – 10:00	*Altundag, Selma and Basarır, Metin*	**Lacunary Statistical Convergence in a Paranormed Space**
10:00 – 10:30	*Aydin Akgun, Fatma, Rhoades and Billy E.*	**Absolute Tauberian Constants for H-J Hausdorff matrices**
10:30 – 11:00	*Gumus, Hafize and Savas, Ekrem*	**On $S_\lambda^L(I)$-Asymptotically Statistical Equivalent Sequences**
11:00 – 11:30	*Salih Aytar*	**Rough Statistically Convergent Double Sequences**

24 September 2012 SESSION: 7th Symposium on Numerical Analysis of Fluid Flow and Heat Transfer CHAIR: A. Slaouti (ROOM 1)		
11:30 – 12:00	*C. Harley*	Unsteady Heat Transfer through a Longitudinal Fin: An Investigation into the Effects of Key Parameters
12:00 – 12:30	*G. Mercurio, P. Peerani, P. Richir, W. Janssens and G. Eklund*	Modeling of UF6 Enrichment with Gas Centrifuges for Nuclear Safeguards Activities
12:30 – 13:00	*Vai Kuong Sin, Wen Yue Deng and Wei Hang Xiao*	Study of Motion of Flexible Eel from the Wake of Bluff Body in a Cross Flow

24 September 2012 SESSION: 2nd Symposium on Analysis of Quantum Field Theory CHAIR: Anthony Thomas (ROOM 2)		
11:30 – 12:00	*Markus Schwarz*	Applications of Yang-Mills Thermodynamics
12:00 – 12:30	*Ralf Hofmann*	Fundamental and Effective Yang-Mills Vertices
12:30 – 13:00	*Markus Schwarz*	Discussion
13:00 – 13:30	*Ralf Hofmann*	Discussion

24 September 2012 SESSION: Symposium om Modelling, Simulation and Model Reduction Approaches of Complex and Networked Chemical and Biochemical Systems CHAIR: Constantinos Theodoropoulos (ROOM 3)		
11:30 – 12:00	*Gábor Szederkényi, Z. A. Tuza and Katalin M. Hangos*	Determining Biochemical Reaction Network Structures for Kinetic Polynomial Models with Uncertain Coefficients
12:00 – 12:30	*Michael Binns and Constantinos Theodoropoulos*	Construction and Analysis of Biochemical Networks
12:30 – 13:00	*Christina Charalampidou, Ioannis K. Kookos*	Validation of a Solid Oxide Fuel Cell Model

24 September 2012 SESSION: Interdisciplinary Symposium on Complex Systems CHAIR: Vic Law (ROOM: 5)		
11:30 – 12:05	*Tatyana A. Smaglichenko*	Structural Algorithm to Reservoir Reconstruction Using Passive Seismic Data (Synthetic Example)
12:05 – 12:30	*Aude Maignan*	Graph Algorithm for the Simulation of the Interaction between Particles
12:30 – 12:55	*Cuneyt Guzelis*	Engineering Applications of a Dynamical State Feedback Chaotification Method
12:55 – 13:20	*Lucia V. Gambuzza*	Chaos Control in a Chaotic System with Only One Stable Equilibrium Point
13:20 – 13:40	*All Participants*	Closing Ceremony

24 September 2012 SESSION: Statistics and Modelling III &Fractal Geometry, Quantization Dimension and Related Topics CHAIR: (ROOM 6)		
11:30 – 12:00	*A.K. Bedabrata Chand*	Cubic Hermite and Cubic Spline Fractal Interpolation Functions
12:00 – 12:30	*Harald Luschgy*	Geometry of optimal functional quantizers for Gaussian processes
12:30 – 13:00	*Klaus Pötzelberger*	Consistency of the Empirical Quantization Error
13:00 – 13:30	*Mrinal Kanti Roychowdhury*	Quantization coefficients for infinite self-similar mappings

24 September 2012 SESSION: Feedback Linearization of Control Systems CHAIR: Philipe Mullhaupt (Laura Menini) (ROOM 7)		
11:30 – 11:55	*Issa A. Tall*	Partial Feedback Linearization of Control Systems
11:55 – 12:20	*Christopher Nielsen and Manfredi maggiore*	Local Transverse Feedback Linearization with Partial Information for single-input Systems
12:20 – 12:45	*Laura Menini and Antonio Tornambe*	Feedback Linearization of Impulsive Nonlinear Control Systems
12:45 – 13:10	*S.S. Willson, Ph. Mullhaupt,*	Numerical Algorithm for Feedback Linearizable Systems
13:10 – 13:35	*Basile Graf and Philipe Mullhaupt*	Bilinear Control Systems with Forced Integrable Filtration

24 September 2012 SESSION: SCLIT – Symposium on Computer Languages, Implementations and Tools CHAIR: Dr. Mirjana Ivanović (ROOM 8)		
11:30 – 11:50	*Crt Gerlec*, *Marjan Heričko*	The impact of structural source code changes on software quality
11:50 – 12:10	*Dragisa Zunic*, *Pierre Lescanne*	Classical computation with negation
12:10 – 12:30	*Dejan Mitrovic*, *Mirjana Ivanovic*, *Zoran Budimac*	Towards an agent-oriented programming language based on Scala
12:30 – 12:50	*Djordje Herceg*, *Davorka Radaković*, *Dejana Herceg*	Generalizing the Extensibility of a Dynamic Geometry Software
12:50 – 13:10	*Miloš Savić*, *Gordana Rakić*, *Zoran Budimac*, *Mirjana Ivanović*	Extractor of Software Networks from Enriched Concrete Syntax Trees
13:10 – 13:30	*Norbert Pataki*, *Tamás Cséri*, *Zalán Szűgyi*	Task-Specific Style Verification
Lunch Break		

24 September 2012 SESSION: Boundary value problems and integral equations with applications CHAIR: P.A.Krutitskii (ROOM 9)		
11:30 – 12:00	*P.A.Krutitskii*	The Dirichlet problem for the diffusion equation in the exterior of non-closed Lipschitz surfaces
12:00 – 12:30	*Serhii Gryshchuk and Massimo Lanza de Cristoforis*	Singular perturbation of simple Steklov eigenvalues
12:30 – 13:00	*Arvet Pedas and Gennadi Vainikko*	What is the complexity of weakly singular integral equations?"
13:00 – 13:30	*Arvet Pedas and Mikk Vikerpuur*	Smoothing transformation and cubic spline collocation for weakly singular Fredholm integral equations with boundary singularities
Lunch Break		

24 September 2012 SESSION: Sequence spaces, Summability and Applications CHAIR: Savas, Ekrem (ROOM 10)		
11:30 – 12:00	*Aasma, Ants*	Some Alternative Methods of Convergence Acceleration
12:00 – 12:30	*Guncan, Ayşe Nur and Akduman, Seyma*	The q-pell Hyperbolic Functions
12:30 – 13:00	*Guncan, Ayşe Nur and Erbil, Yeşim*	The q-Fibonacci Hyperbolic Functions
13:00 – 13:30	*Gurdal, Mehmet , Huban, Mualla Birgul and Yamancı, Ulas*	On Generalized Statistical Limit Points in Random 2-Normed Spaces

24 September 2012 SESSION: Applied and Numerical Mathematics III CHAIR: Toshiaki Itoh (ROOM 1)		
15:00 – 15:30	*Mohammed Al-Kadhi*	Approximation of Solutions to an Abstract Cauchy Problem for a System of Parabolic Equations
15:30 – 16:00	*Toshiaki Itoh*	Construction of Difference Equations from Symmetries of ODEs
16:00 – 16:30	*M. Itskov, R. Dargazany and K. Hörnes*	A Simple Procedure for Higher-Order Derivatives of the Inverse Function
16:30 – 17:00	*Ryosuke Miyaura and Atsushi Mukaihira*	Newton Interpolation and the Nonautonomous Discrete KP Equation
17:00 – 17:30	Coffee Break	

24 September 2012 SESSION: Applied and Numerical Mathematics IV CHAIR: D. Papadopoulos (ROOM 2)		
15:00 – 15:30	*Di Wang and Fucheng Liao*	Robust Preview Control for Uncertain Discrete-time Systems
15:30 – 16:00	*D. Papadopoulos*	Optimal Control of Coupled PDE Networks with Automated Code Generation
16:00 – 16:30	*Jens Hugger and Sima Mashayekhi*	Feedback Options in Nonlinear Numerical Finance

24 September 2012 SESSION: Statistics and Modelling III &Fractal Geometry, Quantization Dimension and Related Topics CHAIR: (ROOM 2)		
16:30 – 17:00	*Astrid Hilbert*	Asymptotic Stationarity for a rescaled Mean Field model

24 September 2012 SESSION: Applied and Numerical Mathematics V CHAIR: Jiří Maděra (ROOM 3)		
15:00 – 15:30	*Jan Kočí, Jiří Maděra, Zbyšek Pavlík and Robert Černý*	Identification of Water Vapour Transport Properties of Gypsum Using Evolutionary Algorithms
15:30 – 16:00	*Václav Kočí, Jiří Maděra, Miloš Jerman, Anton Trník, and Robert Černý*	Computational Analysis of a Modified Guarded Hot Plate Experiment
16:00 – 16:30	*Václav Kočí, Jiří Maděra, and Robert Černý*	Computational Simulation of Salt Transport and Crystallization in Surface Layers of Building Envelopes
16:30 – 17:00	*Jiří Maděra, Kamil Ďurana, Jan Kočí and Robert Černý*	Effect of Hysteresis on Moisture Transport in Porous Building Materials

24 September 2012 – Symposium # 50 2012 Seminar Course on Hadronic mechanics and Chemistry SESSION: 9 – ThMorning = Hadronic Chemistry CHAIR: A. Kholmetskii (ROOM 4)	
15.30 – 16.30	Structural Insufficiencies of Relativistic Scattering Theories and their Apparent resolutions via the Hadronic Scattering Theory R. M. Santilli
16.30 – 17.30	Non-Unitary Lie-Isotopic Scattering Theory of Hadronic Mechanics, Alex Animalu DEMOSTRATION of ICNF will be done in the event the Hadronic Reactor and related neutron and other counters are admitted by Greek Custom

24 September 2012 SESSION: Applied and Numerical Mathematics VI CHAIR: Zdeněk Kala (ROOM 5)		
15:00 – 15:30	*Zdeněk Kala and Jiří Kala*	Lateral-Torsional Buckling Analysis of I-Beams using Shell Finite Elements and Nonlinear Computation Methods
15:30 – 16:00	*Zdeněk Kalaa and Giedrė Sandovič*	Fuzzy Stochastic Analysis of Serviceability and Ultimate Limit States of Two-Span Pedestrian Steel Bridge
16:00 – 16:30	*Rodrigo R. Gomes and Ricardo C. Barros*	Computational Modeling of Monoenergetic Neutral Particle Inverse Transport Problems in Slab Geometry
16:30 – 17:00	*Jiří Kala and Zdeněk Kala*	The Interaction of Local Buckling and Stability Loss of a Thin-Walled Column under Compression
17:00 – 17:30	*R.Parvathi, C.Malathi*	Linear Programming Using Symmetric Triangular Intuitionistic Fuzzy Numbers

24 September 2012 SESSION: Applied and Numerical Mathematics VII CHAIR: Jiří Kunovský (ROOM 6)		
14:30 – 15:00	*Robert Gold*	On Cyclomatic Complexity and Decision Graphs
15:00 – 15:30	*Jiří Kunovský, Michal Kraus, Václav Šátek and Alexandr Szöllös*	Parallel Computations Based on Modified Numerical Integration Methods
15:30 – 16:00	*J. Vala and M. Horák*	Nondestructive Identification of Engineering Properties of Metal Fibre Composites
16:00 – 16:30	*Jiří Kunovský, Václav Šátek, Václav Vopěnka and Alexander Schirrer*	Stiffness in Technical Initial Problems
16:30 – 17:00	*Lotfi Abdelhakim*	A Numerical Method for Creating and Reconstructing Computer-Generated Holograms

24 September 2012 SESSION: Applied and Numerical Mathematics VIII CHAIR: Karel In't Hout (ROOM 7)		
15:00 – 15:30	*K. Volders*	Stability of Central Finite Fifference Schemes on Non-uniform Grids for the Black–Scholes PDE with Neumann Boundary Condition
15:30 – 16:00	*Jens Brouwer, Julius Reiss and Jörn Sesterhenn*	Fully Conservative Finite-Difference Schemes of Arbitrary Order for Compressible Flow
16:00 – 16:30	*Chittaranjan Mishra*	A Stability Result for the MCS Scheme Applied to 2D Convection-Diffusion Equations with Mixed Derivative
16:30 – 17:00	*Tinne Haentjens*	ADI FD Schemes for the Numerical Solution of the Three-dimensional Heston–Cox–Ingersoll–Ross PDE

24 September 2012 SESSION: Applied and Numerical Mathematics IX CHAIR: Hartmut Schwandt (ROOM 8)		
15:00 – 15:30	*Ihor Lubashevsky*	Trajectory Classification of Random Motion with Stochastic Self-Acceleration and its Anomalous Properties
15:30 – 16:00	*Dominik Staab, Tomasz Waclawczyk, Dörte C. Sternel and Michael Schäfer*	Discretization of Mass Forces and its Impact on Drop Break-up in Stirrers
16:00 – 16:30	*Hartmut Schwandt, Frank Huth, Günter Bärwolff and Stefan Berres*	A Macroscopic Model for Crossing Pedestrian Streams
16:30 – 17:00	*Abayomi Omishore*	Verification of Design Procedures of Structural Stability using Probabilistic Methods of Reliability Analysis
17:00 – 17:30	*Vasile S. Craciun, Carsten Bojesen and Viorel Trifa*	A Custom Flexible Experimental setup to Test Air Source Heat Pump for Smart Buildings

24 September 2012 SESSION: Boundary value problems and integral equations with applications CHAIR: A.V. Setukha (ROOM 9)		
15:00 – 15:30	*Anton I. Popov*	Wave wall type solution for liquid surface waves
15:30 – 16:00	*M.Kohr*	TBA

24 September 2012 SESSION: Sequence spaces, Summability and Applications CHAIR: Savas, Ekrem (ROOM 10)		
15:00 – 15:30	*Gurdal, Mehmet , Yamancı, Ulas and Saltan, S*	Generators of Certain Function Banach Algebras and Related Questions
15:30 – 16:00	*Konca, Sukran and Ozturk, Mahpeyker*	Some Topological and Geometric Properties of Sequence Spaces Involving Lacunary Sequence in n−Normed Spaces
16:00 – 16:30	*Ozturk, Mahpeyker and Basarır, Metin*	On Some Euler Weighted Difference Sequence Space of Non-Absolute Type
16:30 – 17:00	*Sahiner, Ahmet , Gokkaya, Havva and Yigit, Tuba*	A New Filled Function for Nonsmooth Global Optimization
17:00 – 17:30	*Sahiner, Ahmet and Yigit, Tuba*	2-Cone Banach Spaces and fixed Point Theorems

END OF THE 6TH DAY

25 September 2012 SESSION: Necessary Conditions for Pareto Minimizers and Applications in Mathematical Finance/Econimics CHAIR: Bao Truong and Christiane Tammer (ROOM 1)		
09:30 – 10:00	*Behnam Soleimani (joint work with Christiane Tammer)*	Approximate Solutions of Vector Optimization Problem with Variable Ordering Structure
10:00 – 10:30	*Elisabeth Köbis (joint work with Christiane Tammer)*	Relations Between Strictly Robust Optimization Problems and a Nonlinear Scalarization Method
10:30 – 11:00	*Shaghaf Alzorba (joint work with Christian Günther)*	Algorithms for Multicriteria Location Problems

25 September 2012 SESSION: Applied and Numerical Mathematics X CHAIR: Canan Ünlü (ROOM 2)		
09:00 – 09:30	*Canan Ünlü ,Mithilesh Singh, A. Yıldırım*	An approximation solution of fractional coupled nonlinear evolution equations

25 September 2012 SESSION: Applied and Numerical Mathematics XI CHAIR: Ch. G. Massouros (ROOM 3)		
09:00 – 09:30	*R.-D. Ene, V. Marinca and B. Căruntu*	Optimal Homotopy Perturbation Method for Solving a Nonlinear Problem in Elasticity
09:30 – 10:00	*Vasile Marinca and Nicolae Herişanu*	An Optimal Homotopy Perturbation Approach to Thin Film Flow of a Fourth Grade Fluid
10:00 – 10:30	*Ch. G. Massouros and G. G. Massouros*	On 2-element Fuzzy and Mimic Fuzzy Hypergroups
10:30 – 11:00	*Vasile Marinca and Nicolae Herişanu*	An Approximate Solution for the Nonlinear Lane-Emden Type Equation on a Semi-Infinite Domain
Coffee Break		

25 September 2012 – Symposium # 50 2012 Seminar Course on Hadronic Mechanics and Chemistry SESSION: 10 – Morning = Lie-admissible Formulations CHAIR: R. M. Santilli (ROOM 4)	
9.00 – 10.00	Non-Unitary Lie-Admissible Scattering Theory of Hadronic Mechanics Alex Animalu
10.00 – 11-00	Ex "On the Geno-GPITT Framework: Spatially Non-Uniform, Complex and Antimatter Systems Anil Bhalekar
11.30 – 12.30	Isounit and Digital Outline of Elementary Particles With Substantiation of Mutual Electron/Nucleon Lattice Erik Trell
12.30 – 13.30	The problems of the 'standard' model of cosmology and the solutions arising from Santilli's theory Peter Rowlands

25 September 2012 SESSION: Applied and Numerical Mathematics XII CHAIR: Osman Hasan (ROOM 5)		
09:00 – 09:30	*Umair Siddique and Osman Hasan*	Analysis Techniques for Fractional Order Systems: A Survey
09:30 – 10:00	*M. K. Hasana and Y. H. Nga*	Steady State Heat Simulator using Generalized AOR Scheme

25 September 2012 SESSION: Applied and Numerical Mathematics XIII CHAIR: Erik Trell (ROOM 6)		
09:00 – 09:30	*Erik Trell*	Mathemimetics I: Self-Computational Prime-Number Line and Three-Dimensional Diophantine Equation Matrix
09:30 – 10:00	*Erik Trell*	Mathemimetics II. Demonstratio Mirabilis of FLT by Infinitely Ascending Cubical Crystal Growth
10:00 – 10:30	*Zihai Shi, Yukari Nakamura, and Masaaki Nakano*	Strain Energy Diagram for Characterizing Fatigue Behavior
10:30 – 11:00	*Pavel Kůs, František Mach, Pavel Karban and Ivo Doležel*	Genetic Algorithms for Multicriteria Shape Optimization of Induction Furnace

25 September 2012 SESSION: Applied and Numerical Mathematics XIV CHAIR: Julius Reiss (ROOM 7)		
09:00 – 09:30	*Julius Reiss*	Energy Stable, Collocated High Order Schemes for Incompressible Flows on Distorted Grids
09:30 – 10:00	*Wieme GADACHA and Faouzi GHORBEL*	A Discretized Surface Representation: Approximation On 3D Meshes
10:00 – 10:30	*Yu Chen, Y.T. Chew and B.C. Khoo*	Heat Transfer in Turbulent Channel Flow Over Protrusions
10:30 – 11:00	*Mehdi Hajji, Tarak Bannour and Faouzi Ghorbel*	Toward an Isotropic Representation of 3D Triangulated Surface Object
Coffee Break		

25 September 2012 SESSION: Applied and Numerical Mathematics XV CHAIR: Massimiliano Ferronato (ROOM 8)		
09:00 – 09:30	*Massimiliano Ferronato, Carlo Janna, Giorgio Pini and Giuseppe Gambolati*	Generalizing Block FSAI Preconditioning to Unsymmetric Indefinite Matrices
09:30 – 10:00	*Danilo Durante and Riccardo Broglia*	Analytical Solutions of One-dimensional Stokes' Problems for Infinite and Finite Domains with Generally Periodic Boundary Conditions
10:00 – 10:30	*Stamatis Kalogerakos, Mustapha Gourma and Chris P. Thompson*	Y-dependent Perturbation Analysis of Wave Growth for 2D Volume of Fluid Model
10:30 – 11:00	*A. Ramírez-López, D. Muñoz-Negron, M. Palomar-Pardeve, M. A. Romero-Romo & V. Cruz-Morales*	Using Finite Difference to Solve Heat Removal in Metallic Sections Industrially Produced

25 September 2012 SESSION: Applied and Numerical Mathematics XVI CHAIR: Gordon R.J. Cooper (ROOM 9)		
09:00 – 09:30	*Gordon R.J. Cooper*	The Extraction of Edges and Ridges from Potential Field Data Using Gradient Vector Information
09:30 – 10:00	*Khalil AbuDahab, Dong-ling Xu and John Keane*	Induction of Belief Decision Trees from Data
10:00 – 10:30	*Walter Carballosa, José M. Rodríguez and José M. Sigarreta*	Hyperbolicity of line graphs with edges of arbitrary lengths
10:30 – 11:00	*Jiamin Liu Xiaorui Zhang Yong Yue Carsten Maple*	Effectively Handling Three-Dimensional Spaces for Container Loading

25 September 2012 SESSION: KFVS Scheme for Compressible Two-phase Flow Models Containing Non-conservative Products CHAIR: Shuanghu Wang (ROOM 10)		
09:00 – 09:30	*Shuanghu Wang, Liang Pan, Baolin Tian, Guiping Zhao*	Two-Species BGK scheme for multi-component flow
09:30 – 10:00	*Yibing Chen, Song Jiang*	An adaptive kinetic scheme for the Baer-Nunziato model of compressible multiphase flows
10:00 – 10:30	*Junbo Cheng, E.F.Toro*	A Lagrangian ADER scheme
10:30 – 11:00	*Jin Qi, Baolin Tian, Shuanghu Wang*	A Roe-related semi-Lagrangian method
11:00 – 11:30	*Baolin Tian , Shuanghu Wang, Jin Qi*	Simulation of RT instability with 5-equation model based global ALE method

25 September 2012 SESSION: Necessary Conditions for Pareto Minimizers and Applications in Mathematical Finance/Econimics CHAIR: Bao Truong and Christiane Tammer (ROOM 1)		
11:30 – 12:00	*Christiane Tammer (joint work with Johannes Tannert)*	Multicriteria Approaches for a Private Equity Fund
12:00 – 12:30	*Bao Truong (joint work with Christiane Tammer)*	Lagrange Necessary Conditions for Pareto Minimizers in Asplund Spaces and Applications
12:30 – 13:00	*Morteza Oveisiha*	
13:00 – 13:30	*Suvendu Pattanaik*	

25 September 2012 SESSION: Applied and Numerical Mathematics XVII CHAIR: Dorota Aniszewska (ROOM 2)		
11:30 – 12:00	*Raphael G. d' A. Vilamiu, Sonia Ternes, Guilherme A. Braga and Francisco F.Laranjeira*	A Model for Huanglongbing Spread between Citrus Plants Including Delay Times and Human Intervention
12:00 – 12:30	*Dorota Aniszewska and Marek Rybaczuk*	Modelling the Behaviour of Ceramics under Various Modes of Mechanical Loading with Movable Cellular Automata
12:30 – 13:00	*Maria Kmetova and Tibor Kmet*	Duality Concept in Curve and Surface Modelling

25 September 2012 SESSION: Applied and Numerical Mathematics XVIII CHAIR: Duygu Bayram (ROOM 3)		
11:30 – 12:00	*Duygu Bayram, Sezen Yıldırım Ünnü, Serhat Şeker*	Lyapunov Exponent for Aging Process in Induction Motor
12:00 – 12:30	*Lyubov Voloshko and Olena Kiselyova*	To the Identification of an Inverse Boundary-Value Problem for the Biharmonic Equation
12:30 – 13:00	*Moshe Gitterman*	New Ttype of Brownian Motion

25 September 2012 SESSION: Applied and Numerical Mathematics XIX CHAIR: S. Štástník (ROOM 5)		
11:30 – 12:00	*S. Štástník*	Evaluation of Thermal Resistance of Building Insulations with Reflective Surfaces
12:00 – 12:30	*Yun-Che Wang and Chern-Hwa Chen*	Dynamic Characteristics of a Cable-Stayed Bridge Measured From Traffic-Induced Vibrations
12:30 – 13:00	*Juan C. Alzate, Francisco J. Moreno, and Jaime Echeverri*	A Spatio-Temporal Extension to the Map Cube Operator
13:00 – 13:30	*P. Lara, A. Poveda and C. Allen*	On the Structural law of Exoplanetary Systems

25 September 2012 SESSION: Applied and Numerical Mathematics XX CHAIR: Oleg Nikonov (ROOM 6)		
11:30 – 12:00	*Oleg Nikonov, Marina Medvedeva*	On the Microeconomic Problems Studied by Portfolio Theory
12:00 – 12:30	*U. Hämarik, U. Kangro, R. Palm, T. Raus*	On Parameter Choice in the Regularization of Ill-posed Problems with Rough Estimate of the Noise Level of the Data
12:30 – 13:00	*Wenqing Wang, Joshua Taron, Uwe-Jens Görke and Olaf Kolditz*	Automatic time stepping with Newton-Raphson method for two-phase fluid flow in porous media

25 September 2012 SESSION: Applied and Numerical Mathematics XXI CHAIR: Y. Kozak (ROOM 7)		
11:30 – 12:00	*Maryam Sadeghi and Bagher Menhaj*	Controlling Chaos in a Defined Trajectory Using Adaptive Fuzzy Logic Algorithm
12:00 – 12:30	*Y. Kozak and G. Ziskind*	Numerical Modeling of a Finned PCM Heat Sink
12:30 – 13:00	*Urve Kangro*	Solution of Three-dimensional Electromagnetic Scattering Problems by Interior Source Methods
13:00 – 13:30	*Igor Averbakh and Jorge Pereira*	Network Construction Problems with Flowtime Objective

25 September 2012 SESSION: Applied and Numerical Mathematics XXII CHAIR: P. Ø. Andersen (ROOM 8)		
11:30 – 12:00	*P. Ø. Andersen and S. Evje*	Two-phase Flow in a Fissurized-porous Media
12:00 – 12:30	*Olawanle P. Layeni and Jesse V. Johnson*	Some Explicit Solutions for a Class of One-Phase Stefan Problems
12:30 – 13:00	*Raffaello Seri and Christine Choirat*	Comparison of Quadrature Rules for the Wielandt-Nyström Method with Statistical Applications

25 September 2012 SESSION: Symposium on Advanced Computation and Information in Natural and Applied Sciences CHAIR: Claus-Peter Rückemann (ROOM 9)		
11:30 – 12:00	*Claus-Peter Rückemann*	Supercomputing Resources Empowering Superstack with Interactive and Integrated Systems

25 September 2012 – Symposium # 50 2012 Seminar Course on Hadronic mechanics and Chemistry SESSION: 11 – Afternoon = Hadronic Chemistry CHAIR: A. Kholmetskii (ROOM 4)	
15.30 – 16.30	On the Geno-GPITT Framework: Spatially Uniform Systems and Geno-nonequilibrium Thermodynamic Time's Arrows Anil Bhalekar
16.30 – 17.30	Non-Unitary Lie-Isotopic Scattering Theory of Hadronic Mechanics Alex Animalu
17.30 – 18.30	Implications of Santilli's IsoRedShift Measurements for Gamma-Ray Burst Observed by SWIFT Satellite Herman J. Mosquera Cuesta

Poster Session	
21 September 2012 15:00-18:00	
SESSION: Symposium (86) on the "Numerical Solution of Differential Equations and their Applications"	
D. F. Papadopoulos, T. E. Simos	A Runge-Kutta method with zero phase-lag and derivatives for the numerical solution of orbital problems.
D.F. Papadopoulos, O.T. Kosmas and T.E. Simos	Deriving Numerical Techniques with Zero Phase-Lag and Derivatives for Initial Value Problems of Second Order
SESSION (131) BE-SMART- BIOMETRY AND EXTREMES: STATISTICAL MODELLING AND R TECHNIQUES	
Raquel Oliveira, A. Manuela Gonçalves and Rosa M. Vasconcelos	A Statistical Model for the Demand of Undergraduate Engineering Courses in Portugal: A First Study of Bologna Process Impact
Lúcio B. de Araújo, Manuela M. Oliveira, Carlos Tadeu dos S. Dias, Amílcar Oliveira, Teresa A. Oliveira	Tucker3 Method in Biometrical research: Analysis of Experiments with three factors, using R
GENERAL SESSION	
J. Kruis and J. Maděra	Numerical Analysis of Coupled Heat and Moisture Transport with Discontinuities
O.T. Kosmas and S. Leyendecker	Phase Fitted Variational Integrators using Interpolation Techniques on non Regular Grids
E.G.Varagouli	Estimation of Mode Choice Models in the Region of Rodopi, North-Eastern Greece

END OF THE 7th DAY

END OF THE CONFERENCE