

19 September 2016 SESSION: THE SIXTH SYMPOSIUM ON ADVANCED COMPUTATION AND INFORMATION IN NATURAL AND APPLIED SCIENCES CHAIR: Dr. Claus-Peter Rückemann (ROOM 2)		
09:00 – 09:05	<u><i>Claus-Peter Rückemann</i></u>	Welcome Notes
09:05 – 10:00	<u><i>Claus-Peter Rückemann</i></u>	Keynote Lecture: Data-centric Model, Context, and High End Computing – Preserving Value of Long-term Data and Big Data
10:00 – 10:30	<u><i>Claus-Peter Rückemann</i></u>	Computation of Content Factors for Advanced Applications
10:30 – 11:00	<u><i>Zlatinka Kovacheva,</i></u> <u><i>Ina Naydenova,</i></u> <u><i>Kalinka Kaloyanova,</i></u> <u><i>and Krasimir Markov</i></u>	Big Data Mining: In-Database Oracle Data Mining over Hadoop
11:00 – 11:30	Coffee Break	

19 September 2016 SESSION: Runge Kutta Methods - Theory, Algorithmic Design and Applications in Computational Engineering and Science CHAIR: Detlef Kuhl (ROOM 3)		
09:00 – 09:30	<u><i>John Butcher</i></u>	Runge and his Legacy
09:30 – 10:00	<u><i>Sigrun Ortleb</i></u> <u><i>Willem Hundsdorfer</i></u>	Patankar-Type Runge-Kutta Schemes for Linear PDEs
10:00 – 10:30	<u><i>Helmut Podhaisky</i></u>	On the Composition of B-series and the Simplifying Assumption C(q)
10:30 – 11:00	<u><i>Andreas Meister</i></u> <u><i>John Butcher</i></u>	Sensitivity of modified Patankar-type schemes for systems of conservative production-destruction equations

19 September 2016 SESSION: Symposium#12 Physical-chemical gas-dynamics: Non-equilibrium processes modeling and simulation CHAIR: Yuriy Gorbachev (ROOM 4)		
09:00 – 09:30	<u><i>Yuriy Gorbachev</i></u>	Renormalized reaction and relaxation rates for harmonic oscillator model
09:30 – 10:00	<u><i>Alla Sergievskaya,</i></u> <u><i>Michael Pogosbekian</i></u>	The Study of Oxygen Dissociation Models Based on Quasi-Classical Calculations in Thermal Nonequilibrium Conditions
10:00 – 10:30	<u><i>V.M. Zhdanov,</i></u> <u><i>A.A. Stepanenko</i></u>	Transport Phenomena in Partially Ionized Molecular Plasma in Magnetic Field
10:30 – 11:00	<u><i>Mikhail A. Zatevakhin</i></u>	Multiphase Convective Flow: A Sedimentation Effect

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Difference & Differential Equations and Applications</p> <p style="text-align: center;">CHAIR: Sandra Pinelas</p> <p style="text-align: center;">(ROOM 5)</p>		
09:00 – 09:30	<i>Vladimir Vasilyev</i>	<i>“On discrete pseudo-differential equations and boundary value problems”</i>
09:30 – 10:00	<i>Haydar Akca, Eadah Al-Zahrani, Valery Covachev, <u>Zlatinka Covacheva</u></i>	<i>“Existence of Periodic Solutions for the Discrete-Time Counterpart of a Neutral-Type Cellular Neural Network with Time-Varying Delays and Impulses”</i>
10:00 – 10:30	<i><u>Irina Astashova</u>, A. V. Filinovskiy and D. A. Lashin</i>	<i>“On Optimal Temperature Control In Hothouses”</i>
10:30 – 11:00	<i>Patricia Wong</i>	<i>“Existence of Solutions of Higher Order Sturm-Liouville Boundary Value Problems”</i>
11:00 – 11:30	Coffee Break	

19 September 2016 SESSION: Second Symposium on Mathematical Modelling of Hydrological Sciences CHAIR: Francesco Napolitano & Fabio Russo (ROOM 6)		
09:00 – 09:30	<i>M. Rianna, E. Ridolfi and F. Napolitano</i>	Comparison of different hydrological similarity measures to estimate flow quantiles
09:30 – 10:00	<i>D. Orlando, M. <u>Giglioni</u>, S. Magnaldi</i>	Comparison between flood prone areas geomorphic features in the Abruzzo Region
10:00 – 10:30	<i>M. <u>Giglioni</u>, F. Lombardo, C. Mineo</i>	Investigating the Hurst-Kolmogorov behavior of climatological time series for Sicily
10:30 – 11:00	<i>C. Mineo, S. Sebastianelli, L. Marinucci, F. Russo</i>	Assessment of the watershed DEM mesh size influence on a large dam design hydrograph
11:00 – 11:30	Coffee Break	

19 September 2016 MS 84: Vulnerability Reduction of Existing Buildings and Design of New Structures in Seismic Area CHAIR: Francesco CLEMENTI, Antonio FORMISANO, Gabriele MILANI (ROOM 7)		
09:00 – 09:20	<i>Otello Bergamo, Eleonora Russo, Fabio Lodolo</i>	Seismic performance evaluation of an historical concrete deck arch bridge using survey and drawing of the damages, in situ tests, dynamic identification and Pushover analysis
09:20 – 09:40	<i>A.B. Habieb G. Milani T. Tavio F. Milani</i>	Low cost rubber seismic isolation of residential new masonry buildings in developing countries
09:40 – 10:00	<i>Enrico Quagliarini, Gabriele Bernardini, Marco D’Orazio</i>	How to Simulate Pedestrian Behaviors in Seismic Evacuation for Vulnerability Reduction of Existing Buildings
10:00 – 10:20	<i>G. Milani E. Bertolesi</i>	Simple quasi-analytical holonomic homogenization model for the non-linear analysis of in-plane loaded masonry panels: Part 1, meso-scale
10:20 – 10:40	<i>G. Milani E. Bertolesi</i>	Simple quasi-analytical holonomic homogenization model for the non-linear analysis of in-plane loaded masonry panels: Part 2, structural implementation and validation
10:40 – 11:00	<i>A. Formisano N. Chieffo F. Fabbrocino R. Landolfo</i>	Seismic vulnerability and damage of Italian historical centres: a case study in the Campania region
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">19 September 2016 SESSION: Special Matrices: Theory and Applications CHAIR: Durmuş Bozkurt (ROOM 8)</p>		
09:00 – 09:30	<i>D. Bozkurt</i>	Spectral Norm of Circulant and Toeplitz Matrices Associated with Horadam Sequence
09:30 – 10:00	<i>A. Coskun</i>	Generating matrix of the bi-periodic Lucas numbers
10:00 – 10:30	<i>A. Oteles</i>	On the Sum of Pell and Jacobsthal Numbers by the Determinants of Hessenberg Matrices
10:30 – 11:00	<i>M. Yasar</i>	Hessenberg Matrices and Padovan Numbers
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION 71: Recent Progress in Electromagnetic Field Theory and New Trends in Inverse Problems</p> <p style="text-align: center;">CHAIR: John Bondestam Malmberg</p> <p style="text-align: center;">(ROOM 9)</p>		
09:30 – 10:00	<u><i>V. Ruas</i></u>	A Hermite FE method for Maxwell's Equations
10:00 – 10:30	<u><i>L. Mpinganzima</i></u>	Adaptive Finite Element Method in Nanophotonic Simulations
10:30 – 11:00	<u><i>J.B. Malmberg</i></u>	Iterative Regularization and Adaptivity for an Electromagnetic Coefficient Inverse Problem
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Some Applications of the Reproducing Kernel Method (RKM) and the Group Preserving Scheme (GPS)</p> <p style="text-align: center;">CHAIR: Mustafa Inc</p> <p style="text-align: center;">(ROOM 11)</p>		
09:00 – 09:30	<i>Ali Akgül</i>	A Novel Simulation Methodology of Fractional Order Nuclear Science Model
09:30 – 10:00	<i>Arzu E. Demirelli</i>	The Expected Value of Richard Distribution
10:00 – 10:30	<i>Hasan Gündüz</i>	($G'G$)-Expansion Method and Its Application to Whitham-Broer-Kaup-Like Equations
10:30 – 11:00	<i>Ökkeş Öztürk</i>	Particular Solutions of the Radial Schrödinger Equation via Nabla Discrete Fractional Calculus Operator

19 September 2016 SESSION: INVITED SPEAKER CHAIR: Helmut Podhaisky (ROOM 1)		
11:30 – 12:30	<u><i>Mayya Tokman</i></u>	TBA

19 September 2016 SESSION: INVITED SPEAKER CHAIR: Mayya Tokman (ROOM 1)		
12:30 – 13:30	<u><i>Helmut Podhaisky</i></u>	On the construction and analysis of general linear methods

19 September 2015	
13:30 – 15:00	<u>Welcome Drink</u>

19 September 2016		
SESSION: THE SIXTH SYMPOSIUM ON ADVANCED COMPUTATION AND INFORMATION IN NATURAL AND APPLIED SCIENCES		
CHAIR: Dr. Claus-Peter Rückemann (ROOM 2)		
15:00 – 15:30	<u>Lutz Schubert,</u> <u>Ana Predoi, and</u> <u>Keith Jeffery</u>	Analysing the Archaeological Context: Reconstructing Stratigraphic Layers
15:30 – 16:00	<u>Iryna Lishchuk</u>	Patentability Aspects of Computational Cancer Models
16:00 – 17:00	<u>Claus-Peter Rückemann,</u> <u>Zlatinka Kovacheva, Lutz</u> <u>Schubert,</u> <u>Iryna Lishchuk, Birgit</u> <u>Gersbeck-Schierholz, and</u> <u>Friedrich Hülsmann</u> <u>(and audience)</u>	Delegates' Summit: Best Practice and Definitions of Data-centric and Big Data - Science, Society, Law, Industry, and Engineering

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Runge Kutta Methods - Theory, Algorithmic Design and Applications in Computational Engineering and Science</p> <p style="text-align: center;">CHAIR: John Butcher</p> <p style="text-align: center;">(ROOM 3)</p>		
15:00 – 15:30	<u><i>Chi-Wang Shu</i></u>	Runge-Kutta and Lax-Wendroff Discontinuous Galerkin Methods for Linear Conservation Laws
15:30 – 16:00	<u><i>Jörg Wensch</i></u>	Partitioned RK-Type methods for computational fluid dynamics
16:00 – 16:30	<u><i>Tim Steinhoff</i></u>	Providing a Single Point Spectrum for Runge-Kutta Schemes of High Stage Order Based on Perturbed Collocation
16:30 – 17:00	<u><i>Tobias Gleim</i></u> <u><i>Bettina Schröder</i></u> <u><i>Detlef Kuhl</i></u>	Simulation of Manufacturing Sequences Using Higher Order Accurate Runge-Kutta Time Integration Schemes
17:00 – 17:30	Coffee Break	

19 September 2016 SESSION: Symposium#12 Physical-chemical gas-dynamics: Non-equilibrium processes modeling and simulation CHAIR: Yuriy Gorbachev (ROOM 4)		
15:00 – 15:30	<u>Alexander Bogdanov,</u> Vladimir Mareev	Hybrid Approach for Nonlinear Wave Equation
15:30 – 16:00	<u>Alexander Degtyarev, Vasily Khramushin, Julia Shichkina</u>	Tensor Methodology and Computational Geometry in Direct Computational Experiments in Fluid Mechanics
16:00 – 16:30	<u>Nikolay Y. Bykov,</u> <u>Yuriy E. Gorbachev</u>	Cluster formation in rarefied water vapour plume
16:30 – 17:00	<u>Julia Shichkina,</u> Alexander Degtyarev, Boris Kulik, Alexander Fridman	Optimization of Relational Databases Schemas by Means of N-tuple Algebra

19 September 2016 SESSION: Difference & Differential Equations and Applications CHAIR: Malgorzata Migda (ROOM 5)		
15:00 – 15:30	<u>Alina Dobrogowska</u> and Grzegorz Jakimowicz	<i>“Factorization method and second order q- and (q,h)-difference equations”</i>
15:30 – 16:00	<u>Piotr Hachuła,</u> <u>Magdalena</u> <u>Nockowska-Rosiak</u> and <u>Ewa Schmeidel</u>	<i>“An Analysis of Dynamics of Discrete Demand-Inventory Model with Bifurcation Diagrams and Phase Portraits”</i>
16:00 – 16:30	<u>Barbara Łupinska,</u> <u>Tatiana Odziejewicz</u> and <u>Ewa Schmeidel</u>	<i>“Some properties of generalized fractional integrals and Derivatives”</i>
16:30 – 17:00	<u>Ewa Girejko,</u> <u>Agnieszka B.</u> <u>Malinowska, Ewa</u> <u>Schmeidel and</u> <u>Małgorzata</u> <u>Zdanowicz</u>	<i>“On the Cucker–Smale model with the Hahn operator”</i>
17:00 – 17:30	Coffee Break	

19 September 2016 SESSION:#59:5th Generating Functions of Special Numbers and Their Applications Organizer: YILMAZ SIMSEK CHAIR: Ismail Naci CANGUL (ROOM 6)		
14:30 – 15:00	<u>Y. SIMSEK</u>	On combinatorial type numbers related to some special numbers
15:00 – 15:30	<u>R. DERE</u>	Some Identities of the q-Laguerre Polynomials on q-Umbral Calculus
15:30 – 16:00	<u>I.KUCUKOGLU</u>	On k-ary Lyndon Words And Their Generating Function
16:00 – 16:30	<u>G. OZDEMIR</u>	Identities and Relations Associated with Lucas and Some Special Sequences
16:30 – 17:00	<u>E. YULUKLU</u>	Remarks on generalized Apostol-Euler type Polynomials and numbers
17:00 – 17:30	Coffee Break	

19 September 2016 MS 84: Vulnerability Reduction of Existing Buildings and Design of New Structures in Seismic Area CHAIR: Francesco CLEMENTI, Antonio FORMISANO, Gabriele MILANI (ROOM 7)		
15:00 – 15:20	<i>Gianluca Maracchini, Francesco Clementi, Enrico Quagliarini, Stefano Lenci, Francesco Monni</i>	Preliminary study of the influence of different modelling choices and materials properties uncertainties on the seismic assessment of an existing RC school building
15:20 – 15:40	<i>Capozucca Roberto, Magagnini Erica, Pace Giuseppe</i>	Bond of CFRP strips in the Strengthening of Brickwork Masonry
15:40 – 16:00	<i>E. Bertolesi G. Milani</i>	Homogenized Approach for the Non Linear Dynamic Analysis of Entire Masonry Buildings by means of Rigid Plate Elements and Damaging Interfaces
16:00 – 16:20	<i>Scalbi Agnese, Clementi Francesco, Cocchi Gianmichele, Lenci Stefano</i>	Seismic assessment of existing precast concrete buildings: influence of deformable connections
16:20 – 16:40	<i>Clementi Francesco, Mezzapelle Pardo Antonio, Cocchi Gianmichele, Lenci Stefano</i>	Global analyses of historical masonry buildings: equivalent frame vs 3D solid models
16:40 – 17:00	<i>A. Formisano G Chiumento F Fabbrocino R Landolfo</i>	Comparative seismic evaluation between numerical analysis and Italian Guidelines on Cultural Heritage applied to the case study of a masonry building compound
17:00 – 17:30	Coffee Break	

19 September 2016 SESSION: Special Matrices: Theory and Applications CHAIR: M. Yasar (ROOM 8)		
15:00 – 15:30	<i>N. Yilmaz</i>	On Properties of Bi-Periodic Fibonacci and Lucas Polynomials
15:30 – 16:00	<i>H.K. Duru</i>	Integer Powers of Certain Complex Anti-Pentadiagonal Toeplitz Matrices
16:00 – 16:30	<i>A. Z. Kucuk</i>	A Recursive Relations For The Permanents of The Certain Type of k-Tridiagonal Symmetric Toeplitz Matrix

19 September 2016 SESSION 71: Recent Progress in Electromagnetic Field Theory and New Trends in Inverse Problems CHAIR: John Bondestam Malmberg (ROOM 9)		
15:00 – 15:30	<i><u>D. Knyazkov</u></i>	Simulation of Diffraction on a Layer Using the Method of Projections
15:30 – 16:00	<i><u>E.D. Derevyanchuk</u></i>	Permittivity Reconstruction of a One-Sectional Diaphragm in a Rectangular Waveguide
16:00 – 16:30	<i><u>C. Standar</u></i>	Finite Element Schemes for Fermi equations
16:30 – 17:00	<i><u>L. Beilina</u></i>	Quantitative Imaging Technique Using the Layer-stripping Algorithm
17:00 – 17:30	Coffee Break	

19 September 2016 SESSION: Advanced Statistical Methods and Applications CHAIR: CEM KADILAR (ROOM 10)		
15:00 – 15:20	<u><i>Alessandro Barbiero</i></u>	Discrete Weibull variables linked by Farlie-Gumbel-Morgenstern copula
15:20 – 15:40	<u><i>Hatice Isik, Nihal Ata Tutkun, and Durdu Karasoy</i></u>	Extended Cox Regression Model: The Choice of Time Function
15:40 – 16:00	<u><i>Semra Turkan</i></u>	Analysis of The Labor Productivity of Enterprises Via Quantile Regression
16:0 – 16:20	<u><i>Gamze Ozel and Selen Cakmakyapan</i></u>	A New Generalized Poisson Lindley Distribution
16:20 – 16:40	<u><i>Cem Kadilar and Hatice Oncel Cekim</i></u>	Hartley-Ross Type Estimators in Simple Random Sampling

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Some Applications of the Reproducing Kernel Method (RKM) and the Group Preserving Scheme (GPS)</p> <p style="text-align: center;">CHAIR: Ali Akgül</p> <p style="text-align: center;">(ROOM 11)</p>		
15:00 – 15:30	<i>Ozlem Ersoy Hepson</i>	An Extended Cubic B-spline Finite Element Method for Solving Generalized Burgers-Fisher Equation
15:30 – 16:00	<i>Ali Akgül</i>	On Solutions of Higher-Order Boundary Value Problems
16:00 – 16:30	<i>Ozlem Ersoy Hepson</i>	Generation of the Trigonometric Cubic B-Spline Collocation Solutions for the Kuramoto-Sivashinsky(KS) Equation
16:30 – 17:00	<i>Reşat Yilmazer</i>	Discrete Fractional Solutions of the Radial Equation of the Fractional Schrödinger Equation

19 September 2016 SYMPOSIUM 56: Title: III Symposium on Symmetry Methods and Applications to Differential Equations CHAIR: Maria Luz Gandarias and Maria Santos Bruzon (ROOM 2)		
17:30 – 18:00	<u>Masood Khalique</u>	Solutions and conservation laws for a Kaup-Boussinesq system
18:00 – 18:30	<u>Maria Luz Gandarias</u>	On conservation laws for a generalized Boussinesq equation
18:30 – 19:00	<u>Maria Santos Bruzon</u>	Conservation laws and potential systems for a generalized thin film equation
19:00 – 19:30	<u>Georgy Burde</u>	Transformations from traveling wave (TW) solutions to non-TW solutions of evolution equations via a direct method
19:30 – 20:00	<i>Petr Vojcak</i>	Coverings and nonlocal symmetries of some 3-dimensional Lax-integrable PDEs
20:00 – 20:30	<i>Hynek Baran</i>	Integrable structures on deformed cotangent coverings to PDEs Hynek Baran
20:30 – 21:00	<u>Isaiah Mhlanga</u>	Symmetry analysis and conservation laws of a generalized (2+1)-dimensional Burgers-Kadomtsev-Petviashvili equation

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Runge Kutta Methods - Theory, Algorithmic Design and Applications in Computational Engineering and Science</p> <p style="text-align: center;">CHAIR: Andreas Meister</p> <p style="text-align: center;">(ROOM 3)</p>		
17:30 – 18:00	<u>Michael Groß</u> <u>Julian Dietzsch</u>	Variational-based higher-order energy-momentum schemes with incompatible modes for fiber-reinforced materials
18:00 – 18:30	<u>Sebastian Bär</u> <u>Michael Groß</u>	Higher Order Accurate Geometric Integration in Endochronic Theory
18:30 – 19:00	<u>Sina Ober Blöbaum</u>	On Higher Order Variational Integrators And Their Relation To Runge-Kutta-Methods
19:00 – 19:30	<u>Theresa Wenger</u> <u>Sina Ober-Blöbau}</u> <u>Sigrid Leyendecker</u>	Constrained Galerkin Variational Integrators and Modified Constrained Symplectic Runge-Kutta Methods
19:30 – 20:00	<u>Detlef Kuhl</u> <u>Chuong T. Nguyen</u> <u>Khanh N. Chau</u>	A Two-stage Time-Integration Technique with Runge-Kutta Methods

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: The 5th Symposium on Variational Inequalities and Equilibrium Problems</p> <p style="text-align: center;">CHAIR: Andrea Scapellato</p> <p style="text-align: center;">(ROOM 4)</p>		
17:30 – 18:00	<u>Rita Cirmi</u>	Gradient estimate for solutions of a class of nonlinear elliptic equations below the duality exponent
18:00 – 18:30	<u>Tiziana Durante</u>	Waveguides with a Box-shaped perturbation: eigenvalues of the Neumann problem
18:30 – 19:00	<u>Hichem Ben-El-Mechaiekh</u>	A Topological Approach for the Solvability of Nonlinear Inclusions and Applications
19:00 – 19:30	<u>Andrea Scapellato</u>	Some properties of integral operators on Generalized Morrey Spaces
19:30 – 20:00	<u>Maria Alessandra Ragusa</u>	Environmentally Sensitive Path Index of desertification risk in the main habitat of Sicily
20:00 – 20:30	<u>Annamaria Barbagallo</u>	General stochastic variational formulation for a oligopolistic market equilibrium problem with excesses

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Difference & Differential Equations and Applications</p> <p style="text-align: center;">CHAIR: Felix Sadyrbaev</p> <p style="text-align: center;">(ROOM 5)</p>		
17:30 – 18:00	<u>Oleg A. Kazakov and Liudmila Uvarova</u>	“Electromagnetic Field Boundary Conditions for Metamaterials”
18:00 – 18:30	<u>Liudmila Uvarova</u>	“The Mathematical Model for the Problem “Diffusion – Reaction” at Effect of Electromagnetic Field in Cylindrical System of Coordinate”

<p>19 September 2016</p> <p>SESSION:#59:5th Generating Functions of Special Numbers and Their Applications</p> <p>Organizer: YILMAZ SIMSEK</p> <p>CHAIR: Eda YÜLÜKLÜ</p> <p>(ROOM 6)</p>		
17:30 – 18:00	<u>A.YARDIMCI</u>	Investigation of the Blood Behavior and Vascular Diseases by using Mathematical Physics Principles
18:00 – 18:30	<u>T.ŞANLI</u>	Modelling Of Life Expectancy Data By Using Dagum Distribution
18:30 – 19:00	<u>Ö.KULAK</u>	Boundedness Of The Bilinear Littlewood-Paley Square Function On Variable Lorentz Spaces
19:00 – 19:30	<u>A.A. AYGUNES</u>	Some identities for a special case of Hurwitz-Lerch zeta function
19:30-20:00	<u>G. G. AYGUNES</u>	The relationship between venture capital investment and macro economic variables via statistical computation method

19 September 2016 MS 84: Vulnerability Reduction of Existing Buildings and Design of New Structures in Seismic Area CHAIR: Francesco CLEMENTI, Antonio FORMISANO, Gabriele MILANI (ROOM 7)		
17:30 – 17:50	<i>M. Valente, G. Milani, R. Shehu</i>	Evaluation of the seismic response of historical masonry bell towers located in South-East Lombardy, Italy
17:50 – 18:10	<i>G. Milani, R. Shehu, M. Valente</i>	Seismic Performance Assessment of Three Masonry Churches through FE Simulations
18:10 – 18:30	<i>Michelangelo Laterza, Michele D'Amato, Vito Michele Casamassima</i>	Seismic Performance Evaluation Of Multi-span Existing Masonry Arch Bridge
18:30 – 18:50	<i>M. Valente G. Milani</i>	An under-designed RC frame: seismic assessment through displacement based approach and possible refurbishment with FRP strips and RC jacketing
18:50 – 19:10	<i>E. Bertolesi G. Milani</i>	Homogenized Rigid Body and Spring-Mass (HRBSM) model for the pushover analysis of out-of-plane loaded unreinforced and FRP reinforced walls
19:10 – 19:30	<i>Monni Francesco Quagliarini Enrico Lenci Stefano Maracchini Gianluca</i>	Strengthening three-leaf masonry with basalt fibre: experimental and numerical data

19 September 2016 SESSION: Fourth Symposium on Computational Mathematics and its Applications CHAIR: Patricia J. Y. Wong (ROOM 8)		
17:30 – 18:00	<i>Xuhao Li, and Patricia J. Y. Wong</i>	CMA02 Nonpolynomial Numerical Scheme for Fourth-Order Fractional Sub-diffusion Equations
18:00 – 18:30	<i>Patricia J. Y. Wong</i>	CMA03 Discrete Quintic Spline for Boundary Value Problem in Plate Deflation Theory
18:30 – 19:00	<i>Teodor Havarneanu</i>	CMA01 Splitting up Approximation Schemes for Stochastic Stokes Equations

19 September 2016 SESSION: Some Applications of the Reproducing Kernel Method (RKM) and the Group Preserving Scheme (GPS) CHAIR: Esra Karatas Akgül (ROOM 11)		
17:30 – 18:00	<i>Mehmet Gürcan</i>	New Wrapped Distribution via Richard Link Function
18:00 – 18:30	<i>Ebru Cavlak Aslan</i>	Optical Solitons in The Dynamics of Thirring Solitons: Jacobi Elliptic Function
18:30 – 19:00	<i>Esma Ates</i>	Optical solitons in multiple-core couplers with the nearest neighbors linear coupling
19:00 – 19:30	<i><u>Esra Karatas Akgül</u></i>	Group Preserving Scheme for the Burgers Equation

END OF THE 1ST DAY

20 September 2016 SESSION: Ninth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: Ewa Weinmueller (ROOM 2)		
09:00 – 09:30	<u><i>L.Brugnano</i></u>	Solving the nonlinear Schroedinger equation using energy conserving Hamiltonian Boundary Value Methods
09:30 – 10:00	<u><i>O.Koch</i></u>	Reduced order of the local error of splitting for parabolic problems
10:00 – 10:30	<u><i>Y.Li</i></u>	Solving Vlasov-Maxwell equations by using Hamiltonian splitting
10:30 – 11:00	<u><i>S.Gonzalez-Pinto</i></u>	Optimizing some 3-stage W-methods for the time integration of PDEs

20 September 2016 SESSION: Applied Mathematics and Mathematical Modelling – A Crucial Field in Both Secondary and Tertiary Education CHAIR: Rita Borromeo Ferri (ROOM 3)		
09:00 – 09:30	<u><i>Rita Borromeo Ferri</i></u>	Learning to Teach Mathematical Modelling in secondary and tertiary education
09:30 – 10:00	<u><i>Detlef Kuhl</i></u>	Leonardo da Vinci - Teacher, Mathematician, Engineer, Artist and Paragon of Novel STEM Learning Concepts
10:00 – 10:30	<u><i>Daniela Gleim</i></u>	Asynchronous and synchronous distance learning in STEM education, using the example of the Online Master Program Wind Energy Systems
10:30 – 11:00	<u><i>Daniel Wallenta</i></u>	Concepts of supporting math courses for mechanical engineers during the first semesters

20 September 2016 SESSION: Dynamical systems and their applications to advanced materials, structures and technologies CHAIR: Jiří Vala (ROOM 4)		
08:55 – 09:20	<i><u>J. Diblík</u></i>	Exponential Stability of Linear Discrete Systems with Nonconstant Matrices and Nonconstant Delay
09:20 – 09:45	<i><u>J. Bařtinec,</u></i> <i>J. Diblík,</i> <i>M. Klimeřová</i>	Large-time Behavior of a Class of Positive Solutions of Discrete Equation
09:45 – 10:10	<i><u>Z. Svoboda,</u></i> <i>J. Diblík</i>	The Solutions of Second-order Linear Differential Systems with Constant Delays
10:10 – 10:35	<i><u>M. Huřek,</u></i> <i>J. Kala, P. Král,</i> <i>F. Hokeř</i>	Concept and Numerical Simulations of a Reactive Anti-Fragment Armour Layer
10:35 – 11:00	<i><u>P. Král,</u></i> <i>P. Hradil, M. Huřek,</i> <i>F. Hokeř</i>	Comparison of Responses of Concrete Damage Material Models with Respect to Optimization-Based Material Parameter Identification
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Difference & Differential Equations and Applications</p> <p style="text-align: center;">CHAIR: Valery Covachev</p> <p style="text-align: center;">(ROOM 5)</p>		
09:00 – 09:30	<i><u>Felix Sadyrbaev and Eduard Brokan</u></i>	“On Attractors of Some Regulatory Networks”
09:30 – 10:00	<i>Sandra Pinelas</i>	“Oscillation of solutions to non-linear first-order difference equations with several advanced arguments”
10:00 – 10:30	<i>Alina Gleska and Malgorzata Migda</i>	“Properties of Solutions of Third-Order Trinomial Difference Equations with Deviating Arguments”
10:30 – 11:00	<i>Janusz Migda</i>	“Convergent Solutions of Difference Equations”

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Numerical Optimization and Applications</p> <p style="text-align: center;">CHAIR: Ana I. Pereira and Fernanda Costa</p> <p style="text-align: center;">(ROOM 7)</p>		
09:00 – 09:30	<i>Extension of the Firefly Algorithm and Preference Rules for Solving MINLP Problems</i>	<u>M. Fernanda P. Costa</u> , Rogério B. Francisco, Ana Maria A.C. Rocha and Edite M.G.P. Fernandes
09:30 – 10:00	<i>Visco-elastic systems as a quadratic eigenvalue problem</i>	<u>Maria Antónia Forjaz</u> , António Mário Almeida, Luís M. Fernandes, Jorge Pamplona and T. de Lacerda–Arôso
10:00 – 10:30	<i>Information Gathering, Management and Transferring for Geospacial Intelligence</i>	Paulo Nunes, Anacleto Correia and <u>M. Filomena Teodoro</u>
10:30 – 11:00	<i>Application of MCSFilter to Estimate Stiction Control Valve Parameters</i>	Andreia Amador, <u>Florbela P. Fernandes</u> , Lino O. Santos and Andrey Romanenko

20 September 2016 SESSION: Mathematical Optimization in Modern Medicine and Engineering CHAIR: Flavius Pater (ROOM 8)		
09:00 – 09:30	<u><i>Alexandru Szabo, Sorin</i></u> <u><i>Nadaban, Tudor Binzar,</i></u> <u><i>Flavius Pater</i></u>	Strict inclusions between some classes of fuzzy relations
09:30 – 10:00	<u><i>Maria-Roberta Gridan,</i></u> <u><i>Sorin Herban, Oana</i></u> <u><i>Grecea</i></u>	Mathematical Support for Surveying Measurements in Order to Obtain the Draft Tube Three-Dimensional Model
10:00 – 10:30	<u><i>Liana Pater, Monica</i></u> <u><i>Izvercian, Larisa Ivascu</i></u>	A Statistical Study on Consumer's Perception of Sustainable Products
10:30 – 11:00	<u><i>Prisecaru Gigel, Sala</i></u> <u><i>Florin</i></u>	Response Model of Vegetation Parameters and Yield in Maize under the Influence of Lithovit Fertilizer

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Symposium on High Performance Computing in Engineering and Environmental Sciences</p> <p style="text-align: center;">CHAIR: Radim Blaheta</p> <p style="text-align: center;">(ROOM 9)</p>		
09:00 – 09:15	<i>J. Zapletal, M. Merta, <u>M. Cermak</u></i>	Acceleration of Boundary Element Method for Linear Elasticity
09:15 – 09:30	<i>F. Kocina, G. Necasova, P. Veigend, J. Chaloupka, V. Satek, <u>J. Kunovsky</u></i>	Modelling VLSI Circuits Using Taylor Series
09:30 – 09:45	<i>P. Veigend, G. Necasova, F. Kocina, J. Chaloupka, V. Satek, <u>J. Kunovsky</u></i>	Real Time Simulation of Transport Delay
09:45 – 10:00	<i><u>P. Marsalek</u>, P. Horyl</i>	Modelling of Bolted Connection with Flexible Yokes Used in Mining Industry
10:00 – 10:15	<i><u>P. Marsalek</u>, P. Horyl, T. Karasek, P. Ferfecki</i>	Influence of Seat Pitch on Passenger Injury Criteria in Regional Railway Traffic
10:15 – 10:30	<i><u>R. Blaheta</u>, O. Axelsson, T. Luber</i>	High order time discretization for DAEs with efficient block preconditioners
10:30 – 10:45	<i><u>R. Blaheta</u>, J. Sary, O. Jakl</i>	Parallel Schwarz domain decomposition solvers with applications in elasticity and poroelasticity
10:45 – 11:00	<i>M. Pecha, P. Jirutkova, <u>M. Cermak</u></i>	Fundamental Improvements of the Piecewise Semi-Smooth Laplace-Beltrami Operator Numerical Stability
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Mathematical modeling and numerical simulation of physical and chemical phenomena in porous materials</p> <p style="text-align: center;">CHAIR: Michal Kuráž (ROOM 10)</p>		
09:00 – 09:20	<i>Václav Kočí, Jiří Maděra, Miloš Jerman and <u>Robert Černý</u></i>	Utilization of Computational Modelling for Determination of Hydration Kinetics of Heterogeneous Materials
09:20 – 9:40	<i><u>Magdaléna Doleželová</u> and Alena Vimmrová</i>	Moisture Influence on Compressive Strength of Ternary Gypsum-based Binders
9:40 – 10:00	<i>Jan Kočí and <u>Jiří Maděra</u></i>	Computational Identification of Freezing Zones in Building Materials Exposed to Low Temperatures
10:00 – 10:20	<i><u>Miloš Jerman</u> and Robert Černý</i>	Hydration Heat of Alkali Activated Fine-Grained Ceramic
10:20 – 10:40	<i><u>Václav Kočí, Jan Kočí,</u> <u>Jiří Maděra, Pavel Beran</u> and Robert Černý</i>	Influence of the Cavity Geometry on the Heat Transfer Conditions inside Highly Perforated Bricks
10:40 – 11:00	<i>Jaroslava Kořátková, Monika Čáchová, <u>Dana</u> <u>Koňáková, Eva</u> Vejmelková and Pavel Reiterman</i>	Mechanical and Thermal Properties of HSC with Fine Natural Pozzolana as SCM
11:00 – 11:30	Coffee Break	

20 September 2016 SESSION: Compactness Conditions in Theory of Nonlinear Integral Equations CHAIR: Beata Rzepka (ROOM 11)		
09:00 – 09:30	<i>Beata Rzepka</i>	On local attractivity and asymptotic stability of solutions of nonlinear Volterra-Stieltjes integral equations in two variables
09:30 – 10:00	<i>Agnieszka Chlebowicz</i>	On the space of integrable with a weight functions
10:00 – 10:30	<i>Aldona Dutkiewicz</i>	On the convergence of successive approximations for a fractional differential equation in Banach spaces
10:30 – 11:00	<i>Monika Krajewska</i>	Existence Theorems for Infinite Systems of Differential Equations in Spaces of Tempered Sequences
11:00 – 11:30	Coffee Break	

<p>20 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Juan I. Montijano</p> <p>(ROOM 1)</p>		
<p>11:30 – 12:30</p>	<p><i><u>Adrian Sandu</u></i></p>	<p>TBA</p>

<p>20 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Adrian Sandu</p> <p>(ROOM 1)</p>		
<p>12:30 – 13:30</p>	<p><i>L. Brugnano, M. Calvo, <u>J.I. Montijano</u> and L. Rández</i></p>	<p>Fourier Methods for Oscillatory Differential Problems with a Constant High Frequency</p>

20 September 2016 SESSION: Ninth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: Luigi Brugnano (ROOM 2)		
15:00 – 15:30	<u><i>T.Buvoli</i></u>	Polynomial Multipoint Methods
15:30 – 16:00	<u><i>R.D'Ambrosio</i></u>	On the numerical treatment of selected oscillatory evolutionary problems
16:00 – 16:30	<u><i>E.Weinmueller</i></u>	Analysis and Numerical Treatment of Singular BVPs in ODEs with Nonsmooth Inhomogeneities
16:30 – 17:00	<u><i>A.Zanna</i></u>	Some integrability properties of the Kahan method
17:00 – 17:30	Coffee Break	

20 September 2016 SESSION: The Second Symposium on Border Zones Between Experimental and Numerical Application CHAIR: Sigrun Ortleb and Christian Seidel (ROOM 3)		
15:00 – 15:30	<u><i>Martin Bähr</i></u>	Fast Explicit Diffusion for Long-Time Integration of Parabolic Problems
15:30 – 16:00	<u><i>Robert Geise</i></u>	A Closed-Form Representation of an Upper Limit Error Function and its Interpretation on Measurements with Noise
16:00 – 16:30	<u><i>Tobias Gleim</i></u>	Experimental and Numerical Aspects of a Thermal Fluid-Structure Phenomenon
16:30 – 17:00	<u><i>Detlef Kuhl</i></u>	Tensegrity Structures – Computational and Experimental Tensegrity Mechanics

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Dynamical systems and their applications to advanced materials, structures and technologies</p> <p style="text-align: center;">CHAIR: Josef Diblík</p> <p style="text-align: center;">(ROOM 4)</p>		
14:55 – 15:20	<u><i>M. Pospíšil</i></u>	Relative Controllability of Delayed Difference Equations to Multiple Consecutive States
15:20 – 15:45	<u><i>J. Vítovec</i></u>	Asymptotic Properties of Solutions of Nonlinear Systems of Dynamic Equations on Time Scales
15:45 – 16:10	<u><i>M. Tůma</i></u> , <i>P. Jura</i>	Continuous Time Models Identification with Laguerre Functions
16:10 – 16:35	<u><i>J. Vala</i></u> , <i>P. Jarošová</i>	Computational Analysis of Thermal Transfer and Related Phenomena based on the Fourier Method
16:35 – 17:00	<u><i>P. Jarošová</i></u> , <i>J. Vala</i>	Computational Prediction and Control of Energy Consumption for Heating in Building Structures
17:00 – 17:30	Coffee Break	

20 September 2016 SESSION: Difference & Differential Equations and Applications CHAIR: Malgorzata Migda (ROOM 5)		
15:00 – 15:30	<i><u>Ruslan Surmanidze</u> and P. Dvalishvili</i>	“On Dimensions of invariant Tensor Fields on Some Isotropy Irreducible Homogeneous Riemann Spaces”
15:30 – 16:00	<i>Malkhaz Bakuradze</i>	“Computing MOD p Honda Formal Group Law”
16:00 – 16:30	<i><u>Otari Jokhadze</u> and S. Kharibegashvili</i>	“Global and blowup solutions of a mixed problem with nonlinear boundary conditions for a one-dimensional semilinear wave equation”
16:30 – 17:00	<i>Daniel Strzelecki</i>	“Symmetric Liapunov center theorems”
17:00 – 17:30	Coffee Break	

20 September 2016
SESSION:#59:5th Generating Functions of
Special Numbers and Their Applications
Organizer: YILMAZ SIMSEK
CHAIR: Mustafa ALKAN
(ROOM 6)

14:30 – 15:00	<u>I.N.CANGÜL</u>	New Formulae for Zagreb Indices
15:00 – 15:30	<u>E.ÇETİN</u>	Some Properties Of The Sum $C_1(h; k)$
15:30 – 16:00	<u>K.E.BİCER</u>	Numerical solutions for Helmholtz Equations using Bernoulli polynomials
16:00 – 16:30	<u>S.ÖZTÜRK</u>	More Fibonacci Numbers Arising From The Suborbital Graphs For The Congruence Subgroup $\Gamma_0(n/h)$
16:30 – 17:00	<u>D.KURICHININ</u>	Integer properties of a composition of exponential generating functions
17:00 – 17:30	Coffee Break	

20 September 2016 SESSION: Numerical Optimization and Applications CHAIR: Ana I. Pereira and Fernanda Costa (ROOM 7)		
15:00 – 15:30	<i>Optimal Procedures for Home Visits— a Case Study</i>	Filipe Alves, Florbela P. Fernandes, <u>Ana I. Pereira</u> and Adília Fernandes
15:30 – 16:00	<i>Parameter Estimation of a Pulp Digester Model with Derivative-free Optimization Strategies</i>	João C. Seíça, Andrey Romanenko, <u>Florbela P. Fernandes</u> , Lino O. Santos and Natércia C. P. Fernandes
16:00 – 16:30	<i>2D/3D Video Content Adaptation Decision Engine Based on Content Classification and User Assessment</i>	<u>Rui Fernandes</u> and M.T. Andrade
16:30 – 17:00	<i>A Fast and Robust Kinematic Model for a 12 DoF Hyper-Redundant Robot Positioning: an Optimization Proposal</i>	<u>José Lima</u> , Ana I. Pereira, Paulo Costa, Andry Pinto and Pedro Costa
17:00 – 17:30	Coffee Break	

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Mathematical Optimization in Modern Medicine and Engineering</p> <p style="text-align: center;">CHAIR: Flavius Pater (ROOM 8)</p>		
15:00 – 15:30	<u><i>Prisecaru Gigel, Sala Florin</i></u>	Variation of Biometric Parameters in Corn Cobs under the Influence of Nitrogen Fertilization
15:30 – 16:00	<u><i>Adrian Alionescu, Alina Corina Bălă, Floarea Maria Brebu, Anca- Maria Moscovici</i></u>	Creating 3D models of historical buildings using geospatial data
16:00 – 16:30	<u><i>Clara – Beatrice Vilceanu, Carmen Grecea and Cosmin Muşat</i></u>	Relevancy of Mathematical Support for Geophysics Determinations

20 September 2016 SESSION: Symposium on High Performance Computing in Engineering and Environmental Sciences CHAIR: Jiri Kunovsky (ROOM 9)		
15:00 – 15:15	<i>D. Horak, L. Riha, R. Sojka, J. Kruzik, M. Beseda, <u>M. Cermak</u>, J. Schuchart</i>	Energy consumption optimization of the Total-FETI solver by changing the CPU frequency
15:15 – 15:30	<i>R. Sojka, L. Riha, D. Horak, J. Kruzik, M. Beseda, <u>M. Cermak</u></i>	The energy consumption optimization of the BLAS routines
15:30 – 15:45	<i><u>A. Ronovsky</u>, T. Brzobohaty, S. Kuchar, D. Vojtek</i>	Modelling of a Spread of Hazardous Substances in a Floreon+ System
15:45 – 16:00	<i><u>A. Ronovsky</u>, S. Kuchar, M. Podhoranyi, D. Vojtek</i>	Automatization of Hydrodynamic Modelling in a Floreon+ System
16:00 – 16:15	<i>K. Motyckova, R. Kucera, A. Markopoulos, <u>V. Satek</u></i>	Comparisons of the Semi-Smooth Newton Method for Solving Contact Problems in 2D and 3D
16:15 – 16:30	<i>R. Kucera, <u>V. Satek</u>, J. Haslinger, F. Pochyly, J. Koko, T. Sassi</i>	Numerical Modelling of the Stokes Flow with Threshold Slip Boundary Conditions
16:30 – 16:45	<i>M. Klemenc, A. Markopoulos, <u>P. Marsalek</u></i>	Analysing of Critical Force Effects of Aircraft Seat Belt Using Truss Elements
16:45 – 17:00	<i>J. Papuga, R. Halama, M. Fusek, J. Rojicek, F. Fojtik, D. Horak, M. Pecha, J. Tomcala, <u>M. Cermak</u>, V. Hapla, R. Sojka, J. Kruzik</i>	Efficient Lifetime Estimation Techniques for General Multiaxial Loading
17:00 – 17:30	Coffee Break	

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Mathematical modeling and numerical simulation of physical and chemical phenomena in porous materials</p> <p style="text-align: center;">CHAIR: Václav Kočí</p> <p style="text-align: center;">(ROOM 10)</p>		
15:00 – 15:20	<i>Michal Kuráž</i>	Inverse Modeling of Soil Infiltration Process
15:20 – 15:40	<i>Tomáš Koudelka, Tomáš Krejčí and Jaroslav Kruis</i>	Coupled Hydro-Mechanical Model for Expansive Clays
15:40 – 16:00	<i>Tomáš Koudelka and Tomáš Krejčí</i>	Analysis of Coupled Heat and Moisture Transport on Parallel Computers
16:00 – 16:20	<i>Tomáš Krejčí and Tomáš Koudelka</i>	Processor Farming Method for Multi-Scale Analysis of Masonry Structures
16:20 – 16:40	<i>Ivana Ivanovic, Aleksandar Sedmak, Milos Milosevic, Ivana Cvetkovic, Andrej Pohar, Blaz Likozar</i>	<i>Influence of Geometry on Pressure and Velocity Distribution in Packed-bed Methanol Steam Reforming Reactor</i>

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: Compactness Conditions in Theory of Nonlinear Integral Equations</p> <p style="text-align: center;">CHAIR: Beata Rzepka</p> <p style="text-align: center;">(ROOM 11)</p>		
15:00 – 15:30	<i>Szymon Dudek</i>	Continuous dependence of the solutions of nonlinear integral quadratic Volterra equation on the parameter
15:30 – 16:00	<i>Rafał Nalepa</i>	Measure of Noncompactness in the Space of Function with Tempered Increments
16:00 – 16:30	<i>Tomasz Zajac</i>	Solvability of Some Volterra-Stieltjes Integral Equations on an Unbounded Interval

20 September 2016 SESSION: Recent Advances in Statistical Theory and Applications CHAIR: Nursel Koyuncu (ROOM 12)		
15:00 – 15:25	<i><u>Aslıhan Şentürk Acar,</u></i> <i>Uğur Karabey</i>	Modeling Number of Claims and Prediction of Total Claim Amount
15:25 – 15:50	<i><u>Uğur Karabey, Nihal Ata</u></i> <i>Tutkun</i>	Model Selection Criterion In Survival Analysis
15:50 – 16:15	<i>Melike Kaya</i> <i>Bahçecitapar</i>	A Comparison of Different Estimation Methods for Simulation-Based Sample Size Determination in Longitudinal Studies
16:15 – 16:40	<i>Nursel Koyuncu</i>	Improved Ratio Estimation of Population Mean Under Median and Neoteric Ranked Set Sampling
16:40-17:00	<i>Nursel Koyuncu</i>	Ratio Estimation of Population Mean Based on Truncated Ranked Set Sampling

20 September 2016 Symposium 47: Statistical Inference in Copula Models and Markov Processes CHAIR: V.A. González-López (ROOM 2)		
17:30 – 18:00	<u>Jesús E. García, V. A. González-López and F. H. Kubo de Andrade</u>	Dissimilarity between Markovian Processes applied to Industrial Processes
18:00 – 18:30	<u>M. Fernández, V. A. González-López and B. S. Hergert</u>	Prediction through a Gumbel Barnett Copula
18:30 – 19:00	<u>M. Fernández, Jesús E. García, V. A. González-López and N. Romano</u>	Right Tail Increasing Dependence between Scores
19:00 – 19:30	<u>Jesús E. García and V. A. González-López</u>	Open Problems

20 September 2016 SESSION: Recent Developments in Differential and Integro-Differential Equations and Their Applications CHAIR: Muhammed Syam (ROOM 3)		
17:30 – 18:00	<u>Muhammed Syam, Mohd Al-Refai, Qasem Al-Mdallal</u>	Numerical method or solving a class of Second order fractional Sturm-Liouville eigenvalue problems
18:00 – 18:30	<u>Qasem Al-Mdallal, Muhammed Syam, Ahmed S. Abu Omer</u>	An Efficient Algorithm Based on Fractional Legendre-Collocation Method for Solving Fractional Initial Value Problems
18:30 – 19:00	<u>Ahcene Merad</u>	On a fractional PDE with nonlocal boundary conditions

20 September 2016 SESSION: Engineering Problems of Plasticity CHAIR: Rostislav I. Nepershin (ROOM 3)		
19:05 – 19:35	<i>Rostislav I. Nepershin</i> <i><u>Maksim A. Prusakov</u></i>	Half-Spherical Shell Deep Drawing
19:35 – 20:05	<i>Rostislav I. Nepershin</i>	Plastic Deformation of Rough Surface Asperities by Rigid Sliding Tool

20 September 2016 SESSION: Dynamical systems and their applications to advanced materials, structures and technologies CHAIR: Jaroslav Bařtinec (ROOM 4)		
17:30 – 18:00	<i><u>Z. Kala</u></i>	Identification of Stochastic Interactions in Nonlinear Models of Structural Mechanics
18:00 – 18:30	<i>G. Nečasová,</i> <i>F. Kocina, P. Veigend,</i> <i>J. Chaloupka,</i> <i>V. řátek,</i> <i><u>J. Kunovský</u></i>	Solving Wave Equation Using Finite Differences and Taylor Series
18:30 – 19:00	<i>J. Chaloupka,</i> <i>F. Kocina, P. Veigend,</i> <i>G. Nečasová,</i> <i><u>J. Kunovský,</u></i> <i>V. řátek</i>	Multiple Integral Computations

20 September 2016 SESSION: Difference & Differential Equations and Applications CHAIR: Ewa Schmeidel (ROOM 5)		
17:30 – 18:00	<i>Zeynep Kayar</i>	“Sturm-Picone Type Theorems for Second Order Nonlinear Impulsive Differential Equations”
18:00 – 18:30	<i><u>Sibel Dođru Akçöl</u> and Agacık Zafer</i>	“A Fixed Point Approach to Singular Impulsive Boundary Value Problems”

20 September 2016 SESSION: General Session CHAIR: Zehra Pınar (ROOM 5)		
18:30 – 19:00	<i>Ekin Deliktas and Mevlut Teymur</i>	Propagation of Surface SH Waves on a Nonlinear Half Space
19:00 – 19:30	<i>Zehra Pınar</i>	Modified Multi-Frequency Homotopy Analysis Method for Evolution Equations
19:30 – 20:00	<i>George Fragoyiannis, Foteini Kariotou and Panayiotis Vafeas</i>	On the Avascular Evolution of an Ellipsoidal Tumour

20 September 2016 SESSION:#59:5th Generating Functions of Special Numbers and Their Applications Organizer: YILMAZ SIMSEK CHAIR: Ahmet YARDIMCI (ROOM 6)		
17:30 – 18:00	<u>M. ALKAN</u>	On the relations between subgroups of a group and submodules of modules over Group Rings
18:00 – 18:30	<u>M. UC</u>	On R- and RG- submodules of modules over Group
18:30 – 19:00	<u>O.ONES</u>	The Structure Of Some Topologies On A Module
19:00 – 19:30	<u>M. UC</u>	On The Socle Of Modules Over A Group
19:30 – 20:00	<u>S. ÇEKEN</u>	On A Subspace Of Dual Zariski Topology

20 September 2016 SESSION 19: <i>Mathematical Methods in Economics and Engineering</i> CHAIR: Ludovic Dan LEMLE (ROOM 7)		
17:30 – 17:45	<u><i>Jiri Hozman,</i></u> <i>Tomas Tichy</i>	On the Discontinuous Galerkin Method for Numerical Pricing of Basket Spread Options with the Average Strike
17:45 – 18:00	<u><i>Justyna Orwat, Ryszard</i></u> <i>Mielimęka</i>	Approximation of Average Course of Measured Curvatures of Mining Area with Reference to Their Forecast Values by Bialek's Formulas
18:00 – 18:45	<u><i>Justyna Orwat</i></u>	Approximation of Average Course of Measured Subsidences of Mining Area by Smooth Splines
18:45 – 19:00	<i>Ryszard Mielimęka,</i> <u><i>Justyna Orwat</i></u>	Approximation of Average Course of Measured Curvatures of Mining Area with Reference to Their Forecast Values by Knothe's Formulas
19:00 – 19:45	<u><i>Miruna Magaon, Erika</i></u> <i>Ardelean, Sorina</i> <i>Şerban, Vasile Puşan</i>	Mathematical Modeling of the Removal Efficiency of Hydrogen from Steels Treated in Vacuum Facilities
19:45 – 20:00	<u><i>Miruna Magaon, Mihail</i></u> <i>Vătăşescu, Teodor</i> <i>Hepuş,</i> <i>Eugen Crişan</i>	The Optimization of the Removal Process of Nitrogen Content from Steels Treated in Vacuum Facilities
20:00 – 20:15	<u><i>Corneliu Birtok-Băneasă,</i></u> <i>Sorin Aurel Raşiu,</i> <i>Teodor Hepuş</i>	Calculation of Thermal Conductivity for New Materials Used in Intake Systems of Internal Combustion Engines

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SESSION: The Third Symposium on Approximation of Curves and Surfaces (ACS 2016)</p> <p style="text-align: center;">CHAIR: Abedallah Rababah (ROOM 8)</p>		
17:30 – 18:00	<i><u>M. Bani Khalid</u></i>	Best Quadratic Spline Interpolation Based on Minimizing the Error
18:00 – 18:30	<i>Z. AlMeraj</i>	The Best Uniform Approximation of Ellipse with Degree Two
18:30 – 19:00	<i>F. Calio and E. Marchetti</i>	About Geometrical Properties of Bivariate Splines with Shape Parameters
19:00 – 19:30	<i><u>P. Chin</u></i>	Numerical solution and asymptotic behavior for a nonlocal reaction-diffusion coupled systems
19:30 – 20:00	<i>A. Rababah</i>	Chebyshev-IV Conformable Fractional Differential Equation
20:00 – 20:30	<i>M. AlQudah</i>	Generalized Gegenbauer Koornwinder's type polynomials change of bases
20:30 – 21:00	<i>M. AlQudah</i>	Characterization of generalized Jacobi Koornwinder's type polynomials

END OF THE 2ND DAY

21 September 2016 SESSION: Ninth Symposium on Recent Trends in the Numerical Solution of Differential Equations CHAIR: Raffaele D'Ambrosio (ROOM 2)		
09:00 – 09:30	<u><i>A.Eremin</i></u>	Functional Continuous Runge-Kutta Methods for Cross-dependent Retarded Systems
09:30 – 10:00	<u><i>V.Finek</i></u>	Wavelet Discretization of Black-Scholes Equation
10:00 – 10:30	<u><i>A.Pedas</i></u>	Spline Collocation for a Class of Nonlinear Fractional Boundary Value Problems
10:30 – 11:00	<u><i>Group Photo</i></u>	

21 September 2016 SESSION: The Second Symposium on Border Zones Between Experimental and Numerical Application CHAIR: Sigrun Ortleb and Christian Seidel (ROOM 3)		
09:00 – 09:30	<u><i>Sahar Fatemeh Maharati and Sophie Tunger</i></u>	Chladni Figures – An Illustrative Benchmark for Validation of Experimental and Computational Dynamics
09:30 – 10:00	<u><i>Lars Ostermann</i></u>	Numerical Flow Analysis of Hydro Power Stations
10:00 – 10:30	<u><i>Christian Seidel</i></u>	Experimental and Numerical Limits in Parameter Studies of a Hydro-aeroelastic Vibration Phenomenon
10:30 – 11:00	<u><i>Veronika Straub</i></u>	Adopting (s)EPIRK Schemes in a Domain-Based IMEX Setting

21 September 2016 SESSION: SCLIT 2016 6th Symposium on Computer Languages, Implementations and Tools CHAIR: Zoran Budimac (ROOM 4)		
09:00 – 09:20	<u>Zoran Budimac</u> and SCLIT team	SCLIT 2016 Opening
09:20 – 09:45	<u>Oksana Nikiforova</u> and <u>Konstantins Gusarovs</u>	Comparison of BrainTool to Other UML Modeling and Model Transformation Tools
09:45 – 10:10	<u>Tomas Vileiniskis</u> , <u>Tomas Skersys</u> , <u>Saulius Pavalkis</u> , <u>Rimantas Butleris</u> and <u>Rita Butkiene</u>	Lightweight Approach to Model Traceability in a CASE Tool
10:10 – 10:35	<u>Maja Pušnik</u> , <u>Gordana Rakic</u> , <u>Zoran Budimac</u> , and <u>Marjan Heričko</u>	Towards the XML Schema Measurement Based on Mapping Between XML and OO Domain
10:35 – 11:00	<u>Igor Dejanović</u> , <u>Renata Vaderna</u> , <u>Gordana Milosavljević</u> , <u>Miloš Simić</u> and <u>Željko Vuković</u>	A Python Tool for the Implementation of Domain- Specific Languages
11:00 – 11:30	Coffee Break	

21 September 2016 SESSION: Difference & Differential Equations and Applications CHAIR: Vladimir Vasilyev (ROOM 5)		
09:00 – 09:30	<i>Arun Kumar Tripathy and <u>S. S. Santra</u></i>	“On Oscillatory Second Order Nonlinear Impulsive Systems”
09:30 – 10:00	<i>Karel Hasík</i>	“Traveling waves in the KPP- Fisher equation”
10:00 – 10:30	<i>Afonso Fernando Tsanzana</i>	“A comparison of the roughness regimes in hydrodynamic lubrication”
10:30 – 11:00	<i>Mehdi Benabdallah</i>	“The general Liapounov Equation for a pencil of operators and its applications”

21 September 2016 SESSION: Multiscale-Multiphysics Approaches for Engineering Applications CHAIR: Gabriele Pozzetti (ROOM 7)		
09:00 – 09:30	<i>Gabriele Pozzetti</i>	Opening(5m)- On the choice of a phase interchange strategy for a multiscale DEM-VOF method
09:30 – 10:00	<i>Florian Hoffmann</i>	Advanced Graphical User Interface for Multiphysics Simulation using XDEM
10:00 – 10:30	<i>Darius Markauskas</i>	Numerical analysis of wet separation of particles by density differences
10:30 – 11:00	<i>Robertas Navakas</i>	Community structure of force chains in granular hopper discharge
11:00 – 11:30	Coffee Break	

21 September 2016 SESSION: 3rd Symposium on Modelling and Simulation in Computer Sciences and Engineering (MSCSE 2016) CHAIR: Sandra Aleksiene (ROOM 8)		
09:00 – 09:30	<i>S. Aleksiene, M. Vaidelys, A. Aleksa and M. Ragulskis</i>	Dynamic Visual Cryptography on Deformable Finite Element Grids
09:30 – 10:00	<i>Wolfgang Schulz, Torsten Hermanns and Toufik Al Khawli</i>	Meta-Modelling, Visualization and Emulation of Multi-Dimensional Data for Virtual Production Intelligence
10:00 – 10:30	<i>Kevin Aleixo and António Curado</i>	Energy Performance Analysis of a Detached Single-Family House to be Refurbished
10:30 – 11:00	<i>D. Miranda, F. Miranda, C.M. Costa, A.M. Almeida and S. Lanceros-Méndez</i>	Thermal Analysis of Lithium-Ion Batteries with Square Frame Geometries by Theoretical Simulations
11:00 – 11:30	Coffee Break	

21 September 2016 SESSION: General Session CHAIR: Ch. Tsitouras (ROOM 9)		
09:00 – 09:30	<i>Ch. Tsitouras and <u>Ioannis Th. Famelis</u></i>	High phase-lag order Runge Kutta pairs of orders 8(7)
09:30 – 10:00	<i>Alexander Gavrikov</i>	Numerical Solution of Vector Sturm-Liouville Problems with a Nonlinear Dependence on the Spectral Parameter
10:00 – 10:30	<i>Barbara Szyszka</i>	A Nine-Point Finite Difference Scheme for One-Dimensional Wave Equation
10:30 – 11:00	<i><u>Sidafa Conde</u>, Sigal Gottlieb, Zachary J. Grant and John N. Shadid</i>	Implicit and Implicit-Explicit Strong Stability Preserving Runge–Kutta Methods With High Linear Order
11:00 – 11:30	Coffee Break	

<p>21 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Hans Munthe-Kaas</p> <p>(ROOM 1)</p>		
11:30 – 12:30	<u><i>Chi-Wang Shu</i></u>	TBA

<p>21 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Chi-Wang Shu</p> <p>(ROOM 1)</p>		
12:30 – 13:30	<u><i>Hans Munthe-Kaas</i></u>	TBA

21 September 2016 SESSION: Modern and Classical Optimization Techniques in Multi Disciplinary Studies CHAIR: Prof. Dr. Ahmet ŞAHİNER (ROOM 2)		
15:00 – 15:25	<i>Ahmet Sahiner</i>	A New Mathematical Modeling Approach for the Energy of Threonine Molecule
15:25 – 15:50	<i>Nurullah Yılmaz</i>	New Global Optimization Method for Non-Smooth Unconstrained Continuous Optimization
15:50 – 16:15	<i>Hamit Armagan</i>	Performance evaluation of the distance education system with fuzzy logic
16:15 – 16:40	<i>Mevlut Ersoy</i>	Resource Allocation Using ANN in LTE
16:40-17:05	<i>Mohammed Chebbah</i>	Simulations for Efficient Combination of Two Lower Bound Functions in Univariate Global Optimization
17:00 – 17:30	Coffee Break	

<p align="center">21 September 2016</p> <p align="center">SESSION: Mathematical Modeling, Numerical Analysis, Optimization and Control of Green Energy Systems and Clean Environment</p> <p align="center">CHAIR: Alexandru Dumitrache and Florin Frunzulica</p> <p align="center">(ROOM 3)</p>		
15:00 – 15:30	<u>Mihai Mihaila-Andries</u>	Aeroelastic Tailoring of Composite Aircraft Wings
15:30 – 16:00	<u>Dumitru Pepelea</u>	CFD analysis of a Darrieus wind turbine
16:00 – 16:30	<u>Mihai-Victor Pricop</u>	Truss systems size and shape optimization
16:30 – 17:00	<u>Mihai-Leonida Niculescu</u>	Glide back booster wind tunnel model testing
17:00 – 17:30	Coffee Break	

<p align="center">21 September 2016</p> <p align="center">SESSION: Algorithms and Applications in Differential Equations and Stochastic Systems</p> <p align="center">CHAIR: Young Cao</p> <p align="center">(ROOM 4)</p>		
15:00 – 15:30	<u>Young Cao</u>	Hybrid ODE/SSA Methods and the Cell Cycle Model
15:30 – 16:00	<u>Min Roh</u>	Data-driven initialization of SParSE
16:00 – 16:30	<u>Shengtai Li</u>	An L-Stable Method for Solving Stiff Hydrodynamics
16:30 – 17:00	<u>Linda Petzold</u>	Modeling the Neuroanatomic Propagation of ALS in the Spinal Cord

<p style="text-align: center;">21 September 2016</p> <p style="text-align: center;">SESSION: Numerical Methods for Solving Boundary Value Problems with Application to Science and Engineering</p> <p style="text-align: center;">CHAIR: Manoj Kumar (ROOM 5)</p>		
15:00 – 15:30	<u><i>Manoj Kumar</i></u>	Numerical Simulation of Perturbation Problems
15:30 – 16:00	<u><i>B.K.Singh</i></u>	A Family of Improved Exponential Chain Ratio And Product Type Estimators for Finite Population Mean In Two Phase Sampling in Presence of Non Response
16:00 – 16:30	<u><i>S.N.Raw</i></u>	Chaotic dynamics of an ecological system with Monod–Haldane type functional response
16:30 – 17:00	<u><i>Khimya Almani</i></u>	Collocation Method for the Coupled System of Ordinary Differential Equation with Variety of Boundary Conditions
17:00 – 17:30	Coffee Break	

<p>21 September 2016</p> <p>SESSION:#59:5th Generating Functions of Special Numbers and Their Applications</p> <p>Organizer: YILMAZ SIMSEK</p> <p>CHAIR: Öznur KULAK</p> <p>(ROOM 6)</p>		
14:30 – 15:00	<u>V.KURICHININ</u>	About some properties of polynomials defined by generating functions of form $F(t, x)^\alpha \cdot G(t, x)^\alpha$
15:00 – 15:30	<u>S.BİLGİÇ</u>	Recurrence Relations On The Generalized Poly-Genocchi Polynomials
15:30 – 16:00	<u>B.KURT</u>	Poly-Frobenius-Euler Polynomials
16:00 – 16:30	<u>A.DAYIOĞLU</u>	On The Relation Between Addition of Collinear Points and Collineations in $PK_2(Q^n)$
16:30 – 17:00	<u>B. SIMSEK</u>	The computation of expected values and moments of special polynomials via characteristic and generating functions
17:00 – 17:30	Coffee Break	

21 September 2016 SESSION: Multiscale-Multiphysics Approaches for Engineering Applications CHAIR: Gabriele Pozzetti (ROOM 7)		
15:00 – 15:30	<i>Zhiyi Li</i>	edcSMOKE: A new combustion solver for stiff chemistry based on OpenFOAM
15:30 – 16:00	<i>Mehdi Banisadi</i>	\Application of the eXtended Discrete Element Method (XDEM) in the melting of a single particle
16:00 – 16:30	<i>Roberto da Via</i>	Multiscale Simulation of a Power-Cooling System
16:30 – 17:00	End of the symposium, discussion	
17:00 – 17:30	Coffee Break	

21 September 2016 SESSION: General Session CHAIR: Michal Benes (ROOM 8)		
15:00 – 15:30	<i>Jurgen Geiser</i>	Iterative Splitting Method as Almost Asymptotic Symplectic Integrator for Stochastic Nonlinear Schrodinger Equation
15:30 – 16:00	<i>Michal Benes</i>	A multi-time step integration algorithm for diffusion problems using a dual method
16:00 – 16:30	<i>Bens Evans</i>	A discontinuous–Galerkin finite element solution approach for the Boltzmann–BGK equation applied to rarefied flows
16:30 – 17:00	<i>A.M.A. Adam, E.B.M. Bashier, M.H.A. Hashim and K.C. Patidar</i>	Fitted Fourier-Pseudospectral Methods for Solving A Delayed Reaction-Diffusion Partial Differential Equation in Biology

21 September 2016 SESSION: General Session CHAIR: Adam J. Zakrzewski (ROOM 9)		
14:30 – 15:00	<i><u>F.S. Oglakkaya</u> and C. Bozkaya</i>	A Numerical Simulation of non-uniform Magnetic Field Effect on Ferrofluid Flow in a Half-Annulus Enclosure with Sinusoidal HotWall
15:00 – 15:30	<i>Shanshan Wang</i>	Split-Step Orthogonal Spline Collocation Method for the Complex Ginzburg-Landau Equation in Two Dimensions
15:30 – 16:00	<i><u>Han Zhou</u> and Paul Andries Zegeling</i>	Stability of A Class of Piecewise Polynomial Approximations for Time-fractional Differential Equations
16:00 – 16:30	<i>Adam J. Zakrzewski</i>	New highly precise results for the three body Coulomb systems
16:30 – 17:00	<i><u>Ondrej Sokol</u>, Miroslav Rada and Michal Cerny</i>	Interval Data and Sample Variance: Expected Computational Complexity of Upper Bound
17:00 – 17:30	Coffee Break	

<p style="text-align: center;">21 September 2016</p> <p style="text-align: center;">SESSION: Operational Research and Applications</p> <p style="text-align: center;">CHAIR: Fernanda A. Ferreira</p> <p style="text-align: center;">(ROOM 2)</p>		
17:50 – 18:10	<i>Petr S. Martyshko, Igor V. Ladovskii, Denis D. Byzov, Alexander G. Tsidaev</i>	On stable solution of 3D gravity inverse problem
18:10 – 18:30	<i>Petr S. Martyshko, Maxim P. Martyshko</i>	On three dimensional magnetic inverse problems solution for stellar bodies
18:30 – 18:50	<i>Petr S. Martyshko, Igor V. Ladovskii, Denis D. Byzov, Alexander G. Tsidaev</i>	Forward gravity problem solution optimization for the finite elements approach
18:50 – 19:10	<i>Elena N. Akimova, Peter S. Martyshko, Vladimir E. Misilov, Andrey I. Tretyakov</i>	On solving the inverse structural magnetic problem for large grids on GPUs
19:10 – 19:30	<i>Elena N. Akimova, Peter S. Martyshko, Vladimir E. Misilov</i>	On finding a density in a curvilinear layer by biconjugate gradient type methods
19:30 – 19:50	<i>San-Nah Sze, Siaw-Ying Doreen Sek, Kang-Leng Chiew, Wei-King Tiong</i>	Simulation of empty container logistic management at Depot
19:50 – 20:10	<i>San-Nah Sze, Yeek-Ling Kwek, Wei-King Tiong, Kang-Leng Chiew</i>	Real life working shift assignment problem
20:10 – 20:30	<i>Luís António de Almeida Vieira</i>	Asymptotic inequalities on the parameters of a strongly regular graph

21 September 2016 SESSION: Mathematical Modeling, Numerical Analysis, Optimization and Control of Green Energy Systems and Clean Environment CHAIR: Alexandru Dumitrache and Daniel Crunteanu (ROOM 3)		
17:30 – 18:00	<u>Mihail Popescu</u>	Design of Experiments with Four-Factors for a PEM Fuel Cell Optimization
18:00 – 18:30	<u>Aurelian Craciunescu</u>	Application of the Lambert W-function for a PV Module Parameters' Estimation
18:30 – 19:00	<u>Florin Frunzulica</u>	Directional Control of a Jet using Synthetic Jets

21 September 2016 SESSION: High Accuracy Solution of Ordinary and Partial Differential Equations Minisymposium #91 CHAIR: Prof. Dr. Murli M. Gupta (ROOM 4)		
17:30 – 18:00	<i>H.V.R. Mittal and <u>Rajendra K. Ray</u></i>	<i>Solving Moving Interface Problems Using a Higher Order Accurate Finite Difference Scheme</i>
18:00 – 18:30	<i><u>Atendra Kumar</u> and Rajendra K. Ray</i>	<i>A Numerical simulation of shear flow past two equal sized square cylinders arranged in parallel at $Re=500$</i>
18:30 – 19:00	<i>Jiten C Kalita</i>	<i>An HOC approach for patterns using Gray-Scott model</i>

<p style="text-align: center;">21 September 2016 SESSION 11: Statistics and Modelling CHAIR: Václav Adamec (ROOM 5)</p>		
17:30 – 18:00	<i>Karl Moder</i>	Effects of Violations of Prerequisites in Sequential Triangular Designs
18:00 – 18:30	<i>Václav Adamec</i>	Power of Heteroskedasticity Tests in Presence of Various Types of Skedastic Function and Sample Size
18:30 – 19:00	<i>Jan Mašek</i>	Parallelized Implementation Of Dynamical Particle System
19:00 – 19:30	<i>Miroslav Vořechovský</i>	Evaluation of pairwise distances among orthogonal grid points in hypercube
19:30 – 20:00	<i>Li Heling</i>	A Mechanism Producing Power Law Distribution
20:00 – 20:30	<i>Hongjun Shen</i>	The New Finite Temperature Schrödinger Equations with Strong or Weak Interaction
20:30 – 21:00	<i>Maalee Almheidat</i>	Lomax-Weibull distribution: Properties and application

21 September 2016 SESSION: Symposium No 97: 2nd Symposium on Integrated Computational Tools for Advanced Manufacturing CHAIR: Nuno Alves and Paula Pascoal-Faria (ROOM 6)		
17:30 – 18:00	<i>Nuno Alves, Carlos Dias, Mónica Oliveira and Paula Pascoal-Faria</i>	A Finite Element Method to Study Multimaterial Wind Towers
18:00 – 18:30	<i>Nuno Alves, Flávio Domingues and Paula Pascoal-Faria</i>	Efficient Computer Method for Automatic 3D Shape Recovery
18:30 – 19:00	<i>Paula Pascoal-Faria and Nuno Alves</i>	Studying Apple Bruise using a finite element method analysis
19:00 – 19:30	<i>Pedro Forte, Daniel A Marinho, Pedro Morouço and Tiago M Barbosa</i>	Comparison by Computer Fluid Dynamics of the Drag Force Acting Upon Two Helmets for Wheelchair Racers

END OF THE 3RD DAY

<p>22 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Luigi Brugnano</p> <p>(ROOM 1)</p>		
<p>09:30 – 10:30</p>	<p><i>Brian Drawert, Nimish Thakore, Brian Mitchell, Erik Pioro, John Ravits and <u>Linda R. Petzold</u></i></p>	<p>Modeling the Neuroanatomic Propagation of ALS in the Spinal Cord</p>

<p>22 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Ernst Hairer</p> <p>(ROOM 1)</p>		
<p>10:30 – 11:30</p>	<p><i><u>John Butcher</u></i></p>	<p>Trees, B-series and G- symplectic Methods</p>

<p>22 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: John Butcher</p> <p>(ROOM 1)</p>		
<p>11:30 – 12:30</p>	<p><i><u>Ernst Hairer and Arieh Iserles</u></i></p>	<p>Banded, skew- symmetric differentiation matrices of high order</p>

22 September 2016 SESSION: SCLIT 2016 5th Symposium on Computer Languages, Implementations and Tools CHAIR: Zoran Budimac (ROOM 2)		
09:00 – 09:25	<u>Marie Duzi</u> , <i>Michal Fait and Marek Mensik</i>	Context Recognition for a Hyperintensional Inference Machine
09:25 – 09:50	<u>Amel Berrachedi</u> , <i>Malika Ioualalen, Ahmed Hammad and Messaoud Rahim</i>	Validation of a SysML Based Design for Wireless Sensor Network
09:50 – 10:15	<u>Davorka Radaković and Djordje Herceg</u>	Metadata Specification in a Dynamic Geometry Software
10:15 – 10:40	<i>Danijel Živanov, Danijela Boberić-Krstićev and Duško Mirković</i>	Usage of Data Warehouse for Analysing Software's Bugs
10:40 – 11:00	<u>Zoran Budimac and SCLIT team</u>	SCLIT 2016 Closing

22 September 2016

12:40

Photo of the Conference

22 September 2016

13:00

Excursion

22 September 2016

20:30

Central Dinner

- **Introduction by Professor Dr. Theodore E. Simos**
- **Honouring Professor Dr. John C. Butcher for his career on Numerical Analysis and Applied Mathematics. Introduction by Professor Dr. Hans Munthe-Kaas**
- **Presentation of the Honorary Fellowship Awards of the European Society of Computational Methods in Sciences, and Engineering**
- **Dinner**

END OF THE 4TH DAY

<p style="text-align: center;">23 September 2016</p> <p style="text-align: center;">SESSION 24: 2nd Symposium on Computational Modeling and Experimental Assessment of Transport Processes in Porous Building Materials</p> <p style="text-align: center;">CHAIR: Zbyšek Pavlík and Oldřich Zmeškal (ROOM 2)</p>		
09:00 – 09:20	<i>Jan Fořt, Anton Trník, Zbyšek Pavlík</i>	Utilization of the PCM Latent Heat for Energy Savings in Buildings
09:20 – 9:40	<i>Milena Pavlíková, Jaroslav Pokorný, Zbyšek Pavlík</i>	Calculation of <i>k</i> Factor Function for the Carbonation Process of Lime-Based Plasters
9:40 – 10:00	<i>Jaroslav Pokorný, Milena Pavlíková, Vratislav Tydlitát, Lenka Scheinherrová, Pavla Rovnaníková, Zbyšek Pavlík</i>	The Use of Glass Powder as a Partial Portland Cement Replacement
10:00 – 10:20	<i>Pavel Beran, Dita Frankeová, Zbyšek Pavlík</i>	Salt Attack in Parking Garage in Block of Flats
10:20 – 10:40	<i>Jan Fořt, Robert Černý, Zbyšek Pavlík</i>	Moisture Diffusivity of HPFRC Exposed to High Temperatures
10:40 – 11:00	<i>Lenka Scheinherrová, Anton Trník, Jaroslav Pokorný, Zbyšek Pavlík, Robert Černý</i>	Effect of Silica Fume on Hydration of Air-Cured Blended Cement Pastes Measured by DSC/TG Analysis
11:00 – 11:30	Coffee Break	

23 September 2016 SESSION: Stochastic Models: Methods and Applications CHAIR: Ioannis Dimitriou (ROOM 3)		
09:00 – 09:30	<u>Dieter Claeys, Jan-Pieter Dorsman, Apoorv Saxena, Joris Walraevens and Herwig Bruneel</u>	A Queueing-theoretic Analysis of the Threshold-based Exhaustive Data-backup Scheduling Policy
09:30 – 10:00	<u>Ekaterina Evdokimova, Sabine Wittevrongel and Dieter Fiems</u>	A Taylor series approach for coupled queueing systems with intermediate load
10:00 – 10:30	<u>Ioannis Papachristos and Dimitrios G. Pandelis</u>	On the Optimal Use of a Slow Server in Two-Stage Queueing Systems
10:30 – 11:00	<u>Chiara Ronzoni Andrea Ferrara and Andrea Grassi</u>	An Optimization Model For The Costs Allocation In Spare Parts Collaborative Networks
11:30 – 11:30	<u>Tuan Phung-Duc and Velika Dragieva</u>	Stability Condition for a Multiserver Retrial Queue with Interaction between Servers and Orbit
11:30 – 12:00	<u>Ioannis Dimitriou</u>	A system with coupled processors and simultaneous arrivals
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">23 September 2016</p> <p style="text-align: center;">SESSION: Recent Advances in Numerical Methods and Simulations in Statics and Dynamics of Structures</p> <p style="text-align: center;">CHAIRS: Juraj Králik, Eva Kormaníková</p> <p style="text-align: center;">(ROOM 4)</p>		
09:00 – 09:30	<u><i>Juraj Králik</i></u>	Probabilistic Analysis of the Efficiency of the Damping Devices Against Nuclear Fuel Container Falling
09:30 – 10:00	<u><i>Juraj Králik,</i></u> <u><i>Juraj Králik, jr.</i></u>	Probabilistic Analysis of the Torsional Effects on the Tall Building Resistance due to Earthquake Even
10:00 – 10:30	<u><i>Jozef Melcer, Daniela</i></u> <u><i>Kuchárová</i></u>	Vehicle - Bridge Interaction, Comparison of Two Computing Models
10:30 – 11:00	<u><i>Kamila Kotrasová, Eva</i></u> <u><i>Kormaníková</i></u>	Dynamic Analysis of Liquid Storage Tanks
11:00 – 11:30	Coffee Break	

23 September 2016 SESSION: 76 Title: Workshop on Numerical Computation in 2D and 3D Data Analysis CHAIR: R. Kozera Co-Chairs: W. Homenda, A. Szczęśna and A. Wiliński (ROOM 5)		
Sub-session chairs: R. Kozera 09:00 – 09:30	<i>R. Kozera,</i> <i>L. Noakes</i> <i>M. Wilkołazka</i>	Complete Spline Interpolation and Exponential Parameterization for Length Estimation of Curves
09:30 – 10:00	<i>A. Michalczuk,</i> <i>K. Wereszczyński,</i> <i>R. Mucha,</i> <i>A. Świtoński,</i> <i>H. Josiński,</i> <i>K. Wojciechowski</i>	Evaluation of Human Dynamic Balance in Grassmann Manifold
10:00 – 10:30	<i>K. Wereszczyński,</i> <i>A. Michalczuk,</i> <i>M. Staniszewski,</i> <i>H. Josiński,</i> <i>A. Świtoński,</i> <i>K. Wojciechowski</i>	Metric Tensor for Riemannian Classifier
10:30 – 11:00	<i>A. Szczęśna,</i> <i>M. Błaszczyszyn</i>	Quantitative Analysis of Arm Movement Smoothness
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">23 September 2016</p> <p style="text-align: center;">SESSION: Optimal Homotopy Asymptotic Approach to Nonlinear Dynamical Systems in Engineering</p> <p style="text-align: center;">CHAIR: Nicolae Herisanu</p> <p style="text-align: center;">(ROOM 6)</p>		
09:00 – 09:30	<i>Liaqat Ali, Saeed Islam, Ishtiaq Ali, Saima Naz Khan</i>	Third Alternative of Optimal Homotopy Asymptotic Method for Solving Nonlinear Boundary Value Problems Arising in Nonlinear Phenomena
09:30 – 10:00	<i>Liaqat Ali, Saeed Islam, Taza Gul, Saima Naz Khan</i>	Analysis of MHD Liquid Film Flow Under the Effect of Variable Viscosity and Thermal Conductivity Using New OHAM
10:00 – 10:30	<i>H. Ullah, S. Islam, F.I. Chohan, M. Fiza</i>	The Optimal Homotopy Asymptotic Method with Application to Nonlinear Advection Equations
10:30 – 11:00	<i>M. Idrees, S. Haq, R. A. Shah</i>	Application of Optimal Homotopy Asymptotic Method for the Solution of Wave Equations
11:00 – 11:30	Coffee Break	

23 September 2016 SESSION: General Session CHAIR: Vladislav N. Kovalnogov (ROOM 7)		
09:00 – 09:30	<u>Vladislav N. Kovalnogov,</u> <i>Ruslan V. Fedorov,</i> <i>Mikhail S. Boyarkin</i>	Method of Calculation of a Thermolysis and Friction of a Turbulent Disperse Flow in Nozzles
09:30 – 10:00	<u>Vladislav N. Kovalnogov,</u> <i>Ruslan V. Fedorov, Larisa V. Khakhaleva, Andrey V. Chukalin, Aleksandr A. Bondarenko, Evgeny N. Kovrizhnykh</i>	The Mechanism and Theoretical Basis of the Management of Intensity of the Heat Transfer Control through Periodic Influences on the Turbulent Boundary Layer
10:00 – 10:30	<u>Vladislav N. Kovalnogov,</u> <i>Ruslan V. Fedorov, Larisa V. Khakhaleva, Aleksandr N. Zolotov</i>	The Modeling of Influence of the External Turbulence over the Heat Transfer towards the Surface of Turbomachinery Blades
10:30 – 11:00	<u>Vladislav N. Kovalnogov,</u> <i>Ruslan V. Fedorov, Yuri A. Khakhalev, Larisa V. Khakhaleva, Andrei V. Chukalin</i>	Application of the Results of Experimental and Numerical Turbulent Flow Researches Based on Pressure Pulsations Analysis
11:00 – 11:30	Coffee Break	

23 September 2016 SESSION: INVITED SPEAKER CHAIR: Philippe Chartier (ROOM 1)		
11:30 – 12:30	<u><i>Steve Ruuth</i></u>	TBA

23 September 2016 SESSION: INVITED SPEAKER CHAIR: Steve Ruuth (ROOM 1)		
12:30 – 13:30	<u><i>Ned Djilali</i></u>	TBA

23 September 2016 SESSION: INVITED SPEAKER CHAIR: Ned Djilali (ROOM 1)		
13:30 – 14:30	<u><i>Philippe Chartier</i></u>	TBA

23 September 2016 SESSION 24: 2nd Symposium on Computational Modeling and Experimental Assessment of Transport Processes in Porous Building Materials CHAIR: Zbyšek Pavlík and Oldřich Zmeškal (Room 2)		
15:00 – 15:20	<i>Pavel Beran, Jan Kočí</i>	The Impact of Temperature Loading on Massive Concrete Block Resistance
15:20 – 15:40	<i>Oldřich Zmeskal, Lucie Trhlikova, Lukas Flala, Pavel Florian, Robert Cerny</i>	Thermal Properties of Alkali-Activated Aluminosilicates with CNT Admixture
15:40 – 16:00	<i>Jan Fořt, Milena Pavlíková, Zbyšek Pavlík</i>	Moisture Buffer Capacity of Cement-Lime Plasters with Enhanced Thermal Storage Capacity
16:00 – 16:40	<i>Dana Koňáková, Jaroslava Koťátková, Monika Čáchová, Eva Vejmelková, René Čechmánek, Pavel Reiterman, Robert Černý</i>	The Influence of High Temperatures on Selected Properties of Calcium Aluminous Composites
16:40 – 17:00	<i>Martina Záleská, Milena Pavlíková, Zbyšek Pavlík</i>	Liquid Moisture Diffusivity of Environmentally Exposed Plasters Accessed by Inverse Analysis
17:00 – 17:30	Coffee Break	

23 September 2016 SESSION: Numerical Methods and Models in Applied Quantum Mechanics and Nanoelectronics CHAIR: Guennadi Kouzaev (ROOM 3)		
15:00 – 15:20	<u><i>A.I. Popov, I.Y.</i></u> <u><i>Popov, D.A.</i></u> <u><i>Gerasimov</i></u>	Resonance state completeness problem for quantum graph
15:20 – 15:40	<u><i>G.S. Makeeva,</i></u> <u><i>O.A. Golovanov,</i></u> <u><i>G.A. Kouzaev</i></u>	Numerical Analysis of Tunable Parametric Terahertz Devices Based on Graphene Nanostructures Using the Projection Method and Autonomous Blocks
15:40 – 16:00	<u><i>G.A. Kouzaev</i></u>	Propagation Control of Edge Hall-Effect Modes in 2D Electron Waveguides with Random Confining Potential

23 September 2016 SESSION: Recent Advances in Numerical Methods and Simulations in Statics and Dynamics of Structures CHAIRS: Juraj Králik, Eva Kormaníková (ROOM 4)		
15:00 – 15:30	<i>Eva Kormaníková,</i> <i>Kamila Kotrasová</i>	Delamination Modeling of Laminate Plate Made of Sublaminates
15:30 – 16:00	<i>Martin Psočný</i>	Equilibrium Paths of an Imperfect Plate with Respect to Its Aspect Ratio
16:00 – 16:30	<i>Martin Psočný,</i> <i>Jozef Havran</i>	Load Bearing Capacity of an Imperfect Very Shallow Shell

<p>23 September 2016</p> <p>SESSION: 76</p> <p>Title: Workshop on Numerical Computation in 2D and 3D Data Analysis</p> <p>CHAIR: R. Kozera</p> <p>Co-Chairs: W. Homenda, A. Szczęsna and A. Wiliński (ROOM 5)</p>		
<p>Sub-session chair: A.Szczęsna 15:00 – 15:30</p>	<p><i>M. Staniszewski, K. Wereszczyński, A. Michalczuk, D. Fernes, J. Segen, M. Kulbacki, K. Wojciechowski</i></p>	<p>New Procedure of Generation of Action Scenarios</p>
<p>15:30 – 16:00</p>	<p><i>P. Skurowski, M. Paszkuta</i></p>	<p>Automatic IMU Sensor Characterization Using Allan Variance Plots</p>
<p>16:00 – 16:30</p>	<p><i>M. Staniszewski, A. Skorupa, Ł. Boguszewicz, A. Michalczuk, K. Wereszczyński, M. Wicher, M. Konopka, M. Sokół, A. Polański</i></p>	<p>Application of Reiteration of Hankel Singular Value Decomposition in Quality Control</p>
<p>16:30 – 17:00</p>	<p><i>R. Kozera, A. Prokopenya, L. Noakes, A. Śluzek</i></p>	<p>Bifurcations in Two-image Photometric Stereo for Orthogonal Illuminations</p>
<p>17:00 – 17:30</p>	<p>Coffee Break</p>	

23 September 2016 SESSION: Optimal Homotopy Asymptotic Approach to Nonlinear Dynamical Systems in Engineering CHAIR: Nicolae Herisanu (ROOM 6)		
15:00 – 15:30	<i>Vasile Marinca, Nicolae Herisanu</i>	Approximate Analytic Solutions for Steady MHD Flow and Heat Transfer of a Third Grade Fluid in Wire Coating Process With Constant Viscosity
15:30 – 16:00	<i>Nicolae Herisanu, Vasile Marinca, Gheorghe Madescu</i>	Nonlinear Dynamics of a Wind Turbine Permanent Magnet Generator System in Different Wind Profile Conditions
16:00 – 16:30	<i>Yashir Khan</i>	Title to be defined

23 September 2016 SESSION: General Session CHAIR: Dawid Barnas (ROOM 7)		
15:00 – 15:30	<i>Sema YAYLA</i>	Regularity of the Global Attractor for the Plate Equation with Nonlocal Nonlinearity in R^n
15:30 – 16:00	<i>Ömür Deveci</i>	The Padovan-Pell-Slyvester Sequences and their Applications
16:00 – 16:30	<i>Erdal Karaduman and Ömür Deveci</i>	The Recurrence Sequences via Sylvester Matrices
16:30 – 17:00	<i>Dawid Barnas and Lesław K. Bieniasz</i>	SSE-based Thomas Algorithm for Quasi-Block-Tridiagonal Linear Equation Systems, Optimised for Small Dense Blocks
17:00 – 17:30	Coffee Break	

23 September 2016 SESSION: Operational Research and Applications CHAIR: Flávio Ferreira (ROOM 2)		
17:30 – 17:50	<i>Flávio Ferreira, Oana R. Bode</i>	Licensing by royalties in a Stackelberg model when the follower is the innovator
17:50 – 18:10	<i>Fernanda A. Ferreira</i>	Privatization and subsidization in a leadership duopoly
18:10 – 18:30	<i>M.A. Medvedeva, M.A. Medvedev</i>	About the use of vector optimization for company's contractors selection
18:30 – 18:50	<i>Igor N. Sachkov, Dmitry B. Berg, Aleksey G. Gorman, Victoria F. Turygina, Oleg E. Khorev</i>	Optimization of the characteristics of three-phase resistive materials using finite element method
18:50 – 19:10	<i>D.B. Berg, O.M. Zvereva, Serik Akenov</i>	“Economic microscope”: The agent-based model set as an instrument in an economic system research
19:10 – 19:30	<i>D.A. Tarasov, A.N. Medvedev, A.P. Sergeev, A.V. Shichkin, A.G. Buevich</i>	A Hybrid method for assessment of soil pollutants spatial distribution
19:30 – 19:50	<i>D.A. Tarasov, A.N. Medvedev, A.P. Sergeev, A.G. Buevich</i>	Review and possible development direction of the methods for modelling of soil pollutants spatial distribution
19:50 – 20:10	<i>Teresa Pereira, Fernanda A. Ferreira</i>	A multicriteria decision making model for assessment and selection of an ERP in a logistics context

23 September 2016 SESSION: General Session CHAIR: Ezio Venturino (ROOM 4)		
17:30 – 18:00	<i>Xing Shi</i>	Numerical Analysis on Cell-cell Interaction of Red Blood Cells during Sedimentation
18:00 – 18:30	<i>Radu C. Cascaval, <u>Ciro D'Apice</u> and Maria Pia D'Arienzo</i>	Simulation of Heart Rate Variability Model in a Network
18:30 – 19:00	<i><u>Ciro D'Apice</u> and Peter I. Kogut</i>	On Optimal Control Problem for Conservation Law Modelling One Class of Highly Re-Entrant Production Systems
19:00 – 19:30	<i><u>Ciro D'Apice</u> and Vittorio Zampoli</i>	Advances on the Time Differential Three-Phase-Lag Heat Conduction Model and Major Open Issues
19:30 – 20:00	<i>Pietro Donà, Sara Manti, Shuyi Yang and <u>Ezio Venturino</u></i>	An ecoepidemic model with control on the diseased predators

23 September 2016 SESSION: 76: Workshop on Numerical Computation in 2D and 3D Data Analysis CHAIR: R. Kozera Co-Chairs: W. Homenda, A. Szczęśna and A. Wiliński (ROOM 5)		
Sub-session chair: R.Kozera 17:30 – 18:00	<i>R. Kozera, M. Wilkołazka</i>	Natural Spline Interpolation and Exponential Parameterization for Length Estimation of Curves
18:00 – 18:30	<i>A. Wiliński</i>	Dataset Reduction Procedure by Features Extraction

23 September 2016 SESSION: General Session CHAIR: Sandor Kristyan (ROOM 7)		
17:30 – 18:00	<u><i>Cem Kadirar and Hatice Oncel Cekim</i></u>	Hartley-Ross type variance estimators in simple random sampling
18:00 – 18:30	<u><i>Kristina Lukoseviciute, Daniel Howard and Minvydas Ragulskis</i></u>	Bernstein polynomials for evolutionary algebraic prediction of short time series
18:30 – 19:00	<i>Sandor Kristyan</i>	On The Statistical Distribution Of Prime Numbers, A View From Where The Distribution Of Prime Numbers Are Not Erratic
19:00 – 19:30	<u><i>Z. Kalogiratou, Th. Monovasilis, T. E. Simos</i></u>	A class of explicit two derivative Runge Kutta methods
19:30 – 20:00	<u><i>Gulcin M. Muslu, Emine Kesici and Goksu Oruc</i></u>	A small dispersion limit to the long wave-short wave interaction equations
20:00 – 20:30	<i>Sergey M. Borodachev</i>	Prediction of the dollar to the ruble rate. A system-theoretic approach
20:30 – 21:00	<u><i>Th. Monovasilis, Z. Kalogiratou, T. E. Simos</i></u>	A class of explicit two derivative Runge Kutta methods for solving oscillatory problems.

23 September 2016 SESSION: General Session POSTER SESSION 17:00 - 20:00	
<i>Fabio Nardecchia, Luca Gugliermetti and Franco Gugliermetti</i>	CFD analysis of onshore oil pipelines in permafrost
<i>Rossella Arcucci, Simone Celestino, Ralf Toumi and Giuliano Laccetti</i>	Toward the S3DVAR data assimilation software for the Caspian Sea

END OF THE 5TH DAY

<p>24 September 2016</p> <p>SESSION: Title: Development of Methods of Intelligent and Adaptive Control for Problems of Physical, Biological and Socio-Economic Processes Modelling</p> <p>CHAIR: Alexander Nikolaevich Kvitko</p> <p>(ROOM 2)</p>		
09:00 – 09:30	<u>Alexander Kvitko</u>	“About local controllability of nonlinear stationary system” by A. N. Kvitko
09:30 – 10:00	<u>Valentina Chashnikova</u>	The suitability conditions of linear models for identification of dynamic systems
10:00 – 10:30	<i>Mikhail Chashnikov</i>	The stochastic characteristics stability in the problem of the dynamic filtration with delay
10:30 – 11:00	<i>M..Grekov</i>	Mathematical Models of Boundary Value Problems in Nanomechanics
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">24 September 2016</p> <p style="text-align: center;">SESSION: 4rd Symposium on Decision Support Systems in Construction Management</p> <p style="text-align: center;">CHAIR: Edyta Plebankiewicz, Dariusz Skorupka</p> <p style="text-align: center;">(ROOM 3)</p>		
09:00 – 09:15	<i>A. Leśniak</i>	Bidding factors – the reduction of the data dimension with the use of PCA
09:15 – 09:30	<i>A. Klaus-Rosińska; D. Kuchta</i>	Maturity of project management in construction companies with the use of fuzzy numbers
09:30 – 09:45	<i>W. Drozd</i>	Analysis of cost regression and post-accident absence
09:45 – 10:00	<i>J. Harasymiuk; J. Barski</i>	Auditing of suppliers as the requirement of quality management systems in construction
10:00 – 10:15	<i>D. Kuchta; E. Ptaszyńska</i>	Fuzzy Based Risk Register for Construction Project Risk Assessment
10:15 – 10:30	<i>A. Duchaczek; D. Skorupka</i>	Method of quantitative evaluation of decision maker's preferences
10:30 – 10:45	<i>J. RYCZYŃSKI</i>	The Example Of Modeling Of Logistics Processes Using Differential Equations
10:45 – 11:00	<i>M. Juszczyk</i>	Self-Organizing Maps Application for the Clustering of the Provinces of Poland According to the Construction Industry Activity
11:00 – 11:30	Coffee Break	

24 September 2016 SESSION: Methods of Nonlinear Mathematical Physics CHAIR: Nikolay Kudryashov (ROOM 4)		
09:00 – 09:20	<i>N. A. Kudryashov, A.A. Kutukov, E. A. Mazur</i>	Metal Hydrogen Sulfide Superconducting Temperature Calculation
09:20 – 09:40	<i>K.A. Alhussan, A.V. Teterev</i>	Simulation of Combustion Products Flow in the Laval Nozzle in the Software Package SIFIN
09:40 – 10:00	<i>A.V. Teterev, P.A. Mandrik, N.I. Misuchenko, L.V. Rudak</i>	The Model of the Mechanical Interaction of Particles with the Combustion Products in a Nozzle
10:00 – 10:20	<i>P.N. Ryabov</i>	The Features of Plastic Flow Localization in Materials Under Shear Deformations
10:20 – 10:40	<i>D.I. Sinelshchikov</i>	On connections of the Liénard- type equations with type II Painlevé-Gambier equations
10:40 – 11:00	<i>Marco Berci</i>	Effect of Cubic Aeroelastic Nonlinearities on Flutter
11:00 – 11:30	Coffee Break	

24 September 2016 SESSION: Analytical and Numerical Methods for Mathematical Models in Applied Sciences CHAIR: Maria P. Speciale and Marianna Ruggieri (ROOM 5)		
09:00 – 09:30	<u><i>Marco Berci</i></u>	Static Aeroelastic Behavior of a Subsonic Plate Wing
09:30 – 10:00	<u><i>Josef Rebenda</i></u>	A Semi-analytical Approach for Solving of Nonlinear Systems of Functional Differential Equations with Delay
10:00 – 10:30	<u><i>Alessandra Ragusa</i></u>	Levels of desertification risk according to MEDALUS-ESPI protocol in the Sicilian forests
10:30 – 11:00	<u><i>Alessandra Jannelli</i></u>	Analytical and Numerical Solutions of fractional type advection-diffusion equation
11:00 – 11:30	Coffee Break	
11:30 – 12:30	<u><i>Maria P. Speciale</i></u>	Construction of Balance Laws of First Order Quasilinear Systems of Partial Differential Equations
12:30 – 13:30	<u><i>Marianna Ruggieri</i></u>	Determination of Balance Laws for Nonautonomous Differential Equations of s-order
Lunch Break		

24 September 2016 SESSION: General Session CHAIR: Pavel Martinek (ROOM 6)		
09:00 – 09:30	<i>Pavel Martinek</i>	Multiset Languages Accepted by Deterministic Multiset Finite Automata with Detection as a Specific Kind of Semilinear Languages
09:30 – 10:00	<i>Marek Dvorak</i>	Learning Investment Indicators Through Data Extension

24 September 2016 SESSION: General Session CHAIR: P. F. Frutuoso e Melo (ROOM 6)		
10:00 – 10:30	<i>S. Levitsky and R. Bergman</i>	Numerical Modeling of Pulse Propagation in Viscoelastic Waveguide
10:30 – 11:00	<i>P. F. Frutuoso e Melo, D. G. Teixeira and A. C. M. Alvim</i>	A Monte Carlo Evaluation of the Accident Rate of a Plant Equipped with an Aging Single-Channel Trip Device
11:00 – 11:30	Coffee Break	
12:00 – 12:30	<i>Otello Bergamo and Eleonora Russ, Fabio Lodolo</i>	Seismic performance evaluation of an original and retrofitted multispan historic concrete deck arch bridge using survey and drawing of the damages, in situ tests, dynamic identification and Pushover analysis
12:30 – 13:00	<i>Behnam Bahrami, El-Houssaine Aghezaf and Veronique Limere</i>	Simulation Modeling for End-of-Aisle Automated Storage and Retrieval System

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: A.P. Krishchenko (ROOM 7)</p>		
09:00 – 09:30	<i><u>A.P. Krishchenko</u> and A.N. Kanatnikov</i>	Construction of Lyapunov Functions by the Localization Method
09:30 – 10:00	<i><u>A.N. Kanatnikov</u> and A.P. Krishchenko</i>	Localization of Compact Invariant Sets for Continuous-time Nonlinear Systems with Uncertainties
10:00 – 10:30	<i>Heinz-Joachim Rack</i>	Explicit Analytical Expression for the Condition Number of Polynomials in Power Form
10:30 – 11:00	<i>Ehsan Yadollahi and El-Houssaine Aghezzaf</i>	Considering Inventory Distributions in a Stochastic Periodic Inventory Routing System
11:00 – 11:30	Coffee Break	
11:30 – 12:00	<i>Josef Rak</i>	Mathematical Model Of Induction Heating
12:00 – 12:30	<i>H. Medina and R. Mutu</i>	Angular-Contact Ball-Bearing Internal Load Estimation Algorithm Using Runtime Adaptive Relaxation

24 September 2016

SESSION: Title: Development of Methods of Intelligent and Adaptive Control for Problems of Physical, Biological and Socio-Economic Processes Modelling

**CHAIR: Alexander Nikolaevich Kvitko
(ROOM 2)**

11:30 – 12:00	<i>Alesova I.M., Babadzanjanz L.K., Pototskaya I.Yu., Pupysheva Yu.Yu., Saakyan A.T.</i>	Piecewise Polynomial Control in Mechanical Systems
12:00 – 12:30	<i>A.Ekimov, Yu.Balykina, M. Svirkin;</i>	Analysis of attainability sets of bilinear control systems
12:30 – 13:00	<i><u>Sergey A. Kabrits</u></i>	Evaluation of Stress-Strain State of Pipelines Based on Measured at some Points the Vertical Displacements
13:00 – 13:30	<i>Alesova I.M., Babadzanjanz L.K., Pototskaya I.Yu., Pupysheva Yu.Yu., Saakyan A.T</i>	Fuel Time Optimal Control of Satellite Oscillations

<p style="text-align: center;">24 September 2016</p> <p style="text-align: center;">SESSION: 4rd Symposium on Decision Support Systems in Construction Management</p> <p style="text-align: center;">CHAIR: Edyta Plebankiewicz, Dariusz Skorupka (ROOM 3)</p>		
11:30 – 11:45	<i>E. Plebankiewicz</i>	Model for selecting elements of building construction influencing on cost increase
11:45 – 12:00	<i>M. Krzemiński</i>	Construction Schedules Slack Time Minimizing
12:00 – 12:15	<i>R. Siczek; D. Skorupka</i>	Mathematic models of a loudspeakers using in building alarm systems - simulation process
12:15 – 13:00	<i>D. Skorupka; A. Duchaczek; A. Waniewska; M. Kowacka</i>	Optimization of the choice of unmanned aerial vehicles used to monitor the implementation of selected construction projects
13:00 – 13:15	<i>M. Walczyński; W. Bożejko; D. Skorupka</i>	Parallel Optimization Algorithm for Drone Inspection in the Building Industry
13:15 – 13:30	<i>K. Zima</i>	Index Cost Estimate Based BIM Method - Computational Example for Sports Fields
13:30 – 13:45	<i>R. Kozik</i>	Application of multi-criteria decision analysis in selecting of sustainable investments
Lunch Break		

24 September 2016 SESSION: Methods of Nonlinear Mathematical Physics CHAIR: Nikolay Kudryashov (ROOM 4)		
11:30 – 12:00	<i>N. A. Kudryashov, <u>A.A. Kutukov</u>, E. A. Mazur</i>	Numerical Study of the Reconstruction of the Conduction Band in the Metal Hydrogen Sulphide
12:00 – 12:30	<i><u>N.A. Kudryashov</u>, A.K. Volkov</i>	Concatenons as the solutions for non-linear partial differential equations.
12:30 – 13:00	<i>E.V. Grigorieva, <u>S.A. Kashchenko</u></i>	Discrete Models of Spiking in Class B Lasers with Variable Delayed Feedback

24 September 2015 SESSION Development of Methods of Intelligent and Adaptive Control for Problems of Physical, Biological and Socio-Economic Processes Modelling CHAIR: Alexander Nikolaevich Kvitko (ROOM 2)		
15:00 – 15:30	<i>Alesova I.M., Babadzanjanz L.K., Pototskaya I.Yu., Pupysheva Yu.Yu., Saakyan A.</i>	Taylor series method of numerical integration of the N-body problem
15:30 – 16:00	<i>K.M. Bregman, M.P. Petrov, A.A. Trusov, A.V. Voitylov, V.V. Vojtylov.</i>	Penalty Function Method of ill-posed Problems Solutions in electro-optical and Spectroscopy Intensity Fluctuation Methods
16:00 – 16:30	<i>A.M. Bregman, M.P. Petrov, A.A. Trusov, A.V. Voitylov, V.V. Vojtylov.</i>	Algorithms of Electro-optical Effect Calculation in Nanodisperse Systems

24 September 2016 SESSION: Metaheuristic and Numerical Analysis in Engineering CHAIR: Assist. Prof. Baris Sayin (ROOM 3)		
15:00 – 15:30	<i>Baris Sayin</i>	An Assessment of SBS Modified Asphalt Concrete Pavements Performance Features Performing Numerical Analysis
15:30 – 16:00	<i>Baris Sayin</i>	Constraint Factor in Optimization of Truss Structures via Flower Pollination Algorithm
16:00 – 16:30	<i>Ahmet Sertaç Karakaş</i>	Acoustic Improvement Design: University Conference Hall
16:30 – 17:00	<i>Baris Sayin</i>	Optimum Tuned Mass Damper Design using Harmony Search with Comparison of Classical Methods
17:00 – 17:30	Coffee Break	

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: Cristian Mojolic (ROOM 4)</p>		
15:00 – 15:30	<i><u>I. Takaidza</u>, O. D. Makinde, K. O. Okosun</i>	Computational Modelling and Optimal Control of Ebola Virus Disease with non-Linear Incidence Rate
15:30 – 16:00	<i><u>Cristian Mojolic</u>, Radu Hulea and Bianca Roxana Parv</i>	Automatic Design Optimization Tool for Passive Structural Control Systems
16:00 – 16:30	<i><u>Cristian Mojolic</u> and Tudor Petrina</i>	Conceptual Optimization of Seismic Isolated Long Span Structures
16:30 – 17:00	<i>Lukas Fryd</i>	Does Asymmetric Correlation Affect Portfolio Optimization?
15:00 – 15:30	Coffee Break	

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: J. Felcman (ROOM 5)</p>		
15:00 – 15:30	<i>Alpar Matyas</i>	Validation of Axisymmetric Lattice Boltzmann Methods for Internal Incompressible Flow in Complex 2D Geometries
15:30 – 16:00	<i><u>Alpar Matyas</u> and Botond Nagy</i>	Numerical Study of Bipolar Coordinate Jeffery-Hamel Flow
16:00 – 16:30	<i><u>P. Luo</u>, C. Rodrigo, F.J. Gaspar and C.W. Oosterlee</i>	On a multigrid method for the coupled Stokes and porous media flow problem
16:30 – 17:00	<i><u>J. Felcman</u> and P. Kubera</i>	On the Eikonal Equation in the Pedestrian Flow Problem
15:00 – 15:30	Coffee Break	

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: Alibek Issakhov (ROOM 4)</p>		
17:30 – 18:00	<i>Nabila OUAZIB, <u>Yacine SALHI</u>, El-Khider SI-AHMED, Jack LEGRAND and G. DEGREZ</i>	Numerical Investigations of Passive Scalar Transport in Taylor-Couette Flows: Counter-Rotation Effect
18:00 – 18:30	<i><u>David Cicoria</u> and C.K. Chan</i>	Effect of Pressure on High Karlovitz Number Lean Turbulent Premixed Hydrogen-Enriched Methane-Air Flames Using LES
18:30 – 19:00	<i>Alibek Issakhov</i>	Numerical modelling of the thermal effects on the aquatic environment from the thermal power plant by using two water discharge pipes
19:00 – 19:30	<i>Stanford Shateyi</i>	Heat and mass transfer for natural convection MHD flow over a permeable moving vertical plate with convective boundary condition in the presence of viscous dissipation

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: Vladimir Popov (ROOM 5)</p>		
17:30 – 18:00	<i>Anna Gorbenko and Vladimir Popov</i>	An Efficient Algorithm for Integrated Task Sequencing and Path Planning for Robotic Remote Laser Welding
18:00 – 18:30	<i>Anna Gorbenko and Vladimir Popov</i>	Task Sequencing for Autonomous Robotic Vacuum Cleaners
18:30 – 19:00	<i>Vladimir Popov</i>	Fingerprints Selection for Topological Localization
19:00 – 19:30	<i>Ekaterina Evdokimova, Sabine Wittevrongel and Dieter Fiems</i>	A Taylor Series Approach for Coupled Queueing Systems with Intermediate Load

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: Svilen S. Valtchev (ROOM 6)</p>		
15:00 – 15:30	<i>Franciszek Grabski</i>	Reliability characteristics in Semi-Markov models
15:30 – 16:00	<i>Robert Gold</i>	Detection of Control Flow Errors in Directed Graphs
16:00 – 16:30	<i>Svilen S. Valtchev and Carlos J. S. Alves</i>	Applying the Method of Fundamental Solutions to Harmonic Problems with Singular Boundary Conditions
17:00 – 17:30	Coffee Break	

24 September 2016 SESSION: General Session CHAIR: Vladimír Holý (ROOM 7)		
15:00 – 15:30	<i>Vladimír Holý</i>	Estimating Integrated Variance in the Presence of Microstructure Noise Using Linear Regression
15:30 – 16:00	<i>Tatiana Polonyankina</i>	Analysis of the Impact of Immigration on Labour Market Using Spatial Models

24 September 2016 SESSION: General Session CHAIR: Jorge Stolfi (ROOM 6)		
17:30 – 18:00	<i>Katarzyna Horbacz</i>	The Central Limit Theorem for Continuous Random Dynamical Systems
18:00 – 18:30	<i>Isaiah Elvis Mhlanga and <u>Chaudry Masood Khalique</u></i>	Travelling wave solutions and conservation laws of a generalized (2+1)-dimensional Burgers-Kadomtsev-Petviashvili equation
18:30 – 19:00	<i>Gilcelia Regiane de Souza and <u>Jorge Stolfi</u></i>	General Algorithms for Multiscale Approximation
19:00 – 19:30	<i><u>Kagiso Mpshe</u>, Andre E Botha, and Moritz Braun</i>	On the use of optimized cubic spline atomic form factor potentials for electronic structure calculations in layered semiconductor structures

<p style="text-align: center;">24 September 2016 SESSION: General Session CHAIR: Adriano Montanaro (ROOM 7)</p>		
17:30 – 18:00	<i>R.S. Herbst, C. Harley and E. Momoniat</i>	On the Relation of Isothermal Collape to Steady Bondi-Accretion
18:00 – 18:30	<i>Adriano Montanaro</i>	Constitutive Restrictions for Deformable Simple Media that are Heat Conducting and Electrically Polarizable
18:30 – 19:00	<i>Gurban Inessa and Tarasyev Alexandr, Jr.</i>	The Indicative Analysis and Ranking of Human Capital Development
19:00 – 19:30	<i>Tarasyev Alexandr and Tarasyev Alexandr, Jr.</i>	The Gravity Model of Labor Migration Behavior

END OF THE 6TH DAY

25 September 2016 SESSION: General Session CHAIR: Vaclav Skala (ROOM 1)		
09:00 – 09:30	<i>Sunjay and Manas Banerjee</i>	Surface Wave Analysis by Wavelet Transform
09:30 – 10:00	<i>Srikumar Panda</i>	A Simple Method for Numerical Solution of Cauchy-type Singular Integral Equation
10:00 – 10:30	<i>Vaclav Skala</i>	Projective Geometry, Duality and Plücker Coordinates for Geometric Computations with Determinants on GPUs
10:30 – 11:00	<i>Vaclav Skala</i>	Least Square Error Approximation and Extended Cross Product Using Projective Representation
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: Alexander Spivak (ROOM 2)</p>		
09:00 – 09:30	<u>Sinan ÖZTAŞ</u> , Gökay AKKAYA	Priority Determination for Reintegration of Disaster Victims into Society after Disaster using Stochastic AHP and Stochastic MOORA Approaches
09:30 – 10:00	Gökhan YURDAKUL, Vecihi YIĞİT	MEASUREMENT AND ANALYSIS OF MENTAL WORK LOAD OF UNIVERSITY ACADEMIC STAFF: AN APPLICATION WITH NASA-TLX
10:00 – 10:30	Alexander Spivak	One Problem of Scheduling Multiple Mobile Agents in the Network
10:30 – 11:00	<u>Ecem Acar</u> , Selman Uguz and Hasan Akın	Hybrid Cellular Automata With Periodic Boundary Condition
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: P. Burkov (ROOM 1)</p>		
11:30 – 12:00	<i><u>AZIEZ Siham</u> and BAHLOUL Derradji</i>	Numerical study of chirped vector solitons in birefringent optical fibers with variable coefficients in the presence of third and fourth order dispersion
12:00 – 12:30	<i>Galina Mehdiyeva, Mehriban Imanova and Vagif Ibrahimov</i>	John Butcher and hybrid methods
12:30 – 13:00	<i><u>P Burkov</u>, Wu Chun, V Burkov, Burkova</i>	FEM Analysis of Soil-Pipe Interaction
13:00 – 13:30	<i>Omar Ramadan</i>	Systematic Explicit/Implicit Dispersive Exponential Evolution Operator FDTD Formulations

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: Lotfi Abdelhakim (ROOM 2)</p>		
11:30 – 12:00	<i>Ayşe Altın</i>	Minimizing the Energy of the Velocity Vector Field of a Curve in R3with Examples
12:00 – 12:30	<i>Askar Dzhumadiil'daev</i>	Super-Trees Calculus
12:30 – 13:00	<i>Lotfi Abdelhakim</i>	Solution Procedure of Dynamical Contact Problems with Friction
13:00 – 13:30	<i><u>Edxon Meneses</u>, Julian Jaramillo and Elisabet Mas de les Valls</i>	Comparison of Radiation and Turbulence Models in a Differentially Heated Cavity and a Backward Facing Step Turbulent Flow

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: Vladimir S. Aslanov (ROOM 3)</p>		
09:00 – 09:30	<i>Vladimir S. Aslanov</i>	Stability of Control Tether Deployment System for Delivery of a Re-entry Body
09:30 – 10:00	<i>M. HELMY SAID</i>	TRANSFORMATION EQUATIONS FOR THE FIFTH DIMENSION
10:00 – 10:30	<i>Erik Prytz, Øyvind Huuse, Bernhard Muller, Jan Bartl and Lars Roar Sætran</i>	Numerical Simulation of Flow around the NREL S826 Airfoil at Moderate Reynolds Number Using Delayed Detached Eddy Simulation (DDES)
10:30 – 11:00	<i>Sruti Chakraborty and Manish Vashishtha</i>	A novel approach to determine moisture migration through pressboard insulation using FEM
11:00 – 11:30	Coffee Break	
11:30 – 12:00	<i>Kamil ARSLAN and Oğuz TURGUT</i>	Forced Convection Fluid Flow Characteristics of R600a/Al ₂ O ₃ Nanorefrigerant
12:00 – 12:30	<i>Shaotao Zhu, Jing Li and Weihu Cheng</i>	Hypernormal Form of a Laminated Composite Plate Dynamical Model

END OF THE 7TH DAY
END OF THE CONFERENCE