

19 September 2016
**The 11th International Symposium on Numerical Analysis of Fluid Flow,
Heat and Mass Transfer**
Numerical Fluids 2016
CHAIR: Ashoke De
(ROOM 1)

9:00 – 10:00	Invited lecture Professor Srdjan Sasic Continuum Simulations of Dense Granular Flows	
10:00 – 10:20	<i><u>Ivan Fořt, Petr Vlček and Tomáš Jirout</u></i>	Liquid Circulation in a Stirred System with an Axial Flow Impeller and a Cylindrical Draft Tube
10:20 – 10:40	<i><u>A.F. Totorean, S.I. Bernad, I.C. Hudrea and R.F. Susan- Resiga</u></i>	Competitive Flow and Anastomosis Angle Influence on Bypass Hemodynamics in Unsteady Flow Conditions
10:40 – 11:00	<i><u>A. Beechook, H. Medina, H. Fadhila, S. Aleksandrova and S. Benjamin</u></i>	Effect of Grid-FilterWidth Definition on Implicitly Filtered Large Eddy Simulations using OpenFOAM

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	

<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: Detlef Kuhl</p> <p style="text-align: center;">(ROOM 3)</p>		
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

<p style="text-align: center;">19 September 2016</p> <p style="text-align: center;">SESSION: Symposium#12 Physical-chemical gas-dynamics: Non-equilibrium processes modeling and simulation</p> <p style="text-align: center;">CHAIR: Yuriy Gorbachev</p> <p style="text-align: center;">(ROOM 4)</p>		
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>Karel Hasík</i>	<i>“Traveling waves in the KPP-Fisher equation”</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>Irina Astashova, 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. Gigliani, S. Magnaldi</i>	Comparison between flood prone areas geomorphic features in the Abruzzo Region
10:00 – 10:30	<i>M. Gigliani, 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	

19 September 2016 SESSION 71: Recent Progress in Electromagnetic Field Theory and New Trends in Inverse Problems CHAIR: John Bondestam Malmberg (ROOM 9)		
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	

19 September 2016 SESSION: Some Applications of the Reproducing Kernel Method (RKM) and the Group Preserving Scheme (GPS) CHAIR: Mustafa Inc (ROOM 11)		
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>Mayya Tokman</u>	New developments in exponential integration

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

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

19 September 2016 The 11th International Symposium on Numerical Analysis of Fluid Flow, Heat and Mass Transfer Numerical Fluids 2016 CHAIR: Ivan Fořt (ROOM 1)		
15:00 – 15:20	<u><i>Z. Chara, B. Kysela and I. Fort</i></u>	Hydraulic efficiency of a Rushton turbine impeller
15:20 – 15:40	<u><i>O. Babayigit, M. Ozgoren, M.H. Aksoy and O. Kocaaslan</i></u>	The Effect of Balance Holes to Centrifugal Pump Performance
15:40 – 16:00	<u><i>R.L. Wang, X. Liang and X.Z. Liu</i></u>	Research on Verification and Validation Strategy of Detonation Fluid Dynamics Code of LAD2D
16:00 – 16:20	<u><i>A. Hammad and J. AlAsfar</i></u>	Comparative Study: The Direct Burning of Oil Shale and Coal
16:20 – 16:40	<u><i>C. L. Dora, A. De and D. Das</i></u>	Numerical simulations of 3D compressible vortex ring

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,</u> <u>Lutz Schubert,</u> <u>Iryna Lishchuk, Birgit</u> <u>Gersbeck-Schierholz,</u> <u>and 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

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

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> <i>Vladimir Mareev</i>	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	<i>Nikolay Y. Bykov,</i> <u>Yuriy E. Gorbachev</u>	Cluster formation in rarefied water vapour plume
16:30 – 17:00	<u>Julia Shichkina,</u> <i>Alexander Degtyarev, Boris Kulik,</i> <i>Alexander Fridman</i>	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	<i><u>Alina Dobrogowska</u> and Grzegorz Jakimowicz</i>	<i>“Factorization method and second order q- and (q,h)-difference equations”</i>
15:30 – 16:00	<i>Piotr Hachuła, Magdalena Nockowska-Rosiak and <u>Ewa Schmeidel</u></i>	<i>“An Analysis of Dynamics of Discrete Demand-Inventory Model with Bifurcation Diagrams and Phase Portraits”</i>
16:00 – 16:30	<i>Barbara Łupinska, Tatiana Odziejewicz and <u>Ewa Schmeidel</u></i>	<i>“Some properties of generalized fractional integrals and Derivatives”</i>
16:30 – 17:00	<i>Ewa Girejko, Agnieszka B. Malinowska, <u>Ewa Schmeidel</u> and Małgorzata Zdanowicz</i>	<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><i>Y. SIMSEK</i></u>	On combinatorial type numbers related to some special numbers
15:00 – 15:30	<u><i>R. DERE</i></u>	Some Identities of the q-Laguerre Polynomials on q-Umbral Calculus
15:30 – 16:00	<u><i>I.KUCUKOGLU</i></u>	On k-ary Lyndon Words And Their Generating Function
16:00 – 16:30	<u><i>G. OZDEMIR</i></u>	Identities and Relations Associated with Lucas and Some Special Sequences
16:30 – 17:00	<u><i>E. YULUKLU</i></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: Advanced Statistical Methods and Applications CHAIR: CEM KADILAR (ROOM 9)		
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>19 September 2016</p> <p>SESSION: Some Applications of the Reproducing Kernel Method (RKM) and the Group Preserving Scheme (GPS)</p> <p>CHAIR: Ali Akgül</p> <p>(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
17:00 – 17:30	Coffee Break	

19 September 2016 SESSION: Runge Kutta Methods - Theory, Algorithmic Design and Applications in Computational Engineering and Science CHAIR: Andreas Meister (ROOM 3)		
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>	<i>“Electromagnetic Field Boundary Conditions for Metamaterials”</i>
18:00 – 18:30	<u>Liudmila Uvarova</u>	<i>“The Mathematical Model for the Problem “Diffusion – Reaction” at Effect of Electromagnetic Field in Cylindrical System of Coordinate”</i>

<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 Physic 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

<p align="center">19 September 2016</p> <p align="center">MS 84: Vulnerability Reduction of Existing Buildings and Design of New Structures in Seismic Area</p> <p align="center">CHAIR: Francesco CLEMENTI, Antonio FORMISANO, Gabriele MILANI (ROOM 7)</p>		
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 71: Recent Progress in Electromagnetic Field Theory and New Trends in Inverse Problems CHAIR: John Bondestam Malmberg (ROOM 9)		
17:30 – 18:00	<i><u>D. Knyazkov</u></i>	Simulation of Diffraction on a Layer Using the Method of Projections
18:00 – 18:30	<i><u>L. Beilina</u></i>	Quantitative Imaging Technique Using the Layer-stripping Algorithm
18:30 – 19:00	<i><u>C. Standar</u></i>	Finite Element Schemes for Fermi equations
19:00 – 19:30	<i><u>E.D. Derevyanchuk</u></i>	Permittivity Reconstruction of a One-Sectional Diaphragm in a Rectangular Waveguide

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 Gürçan</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>Esmâ Ates</i>	Optical solitons in multiple-core couplers with the nearest neighbors linear coupling
19:00 – 19:30	<u><i>Esra Karatas Akgül</i></u>	Group Preserving Scheme for the Burgers Equation

END OF THE 1ST DAY

20 September 2016 The 11th International Symposium on Numerical Analysis of Fluid Flow, Heat and Mass Transfer Numerical Fluids 2016 CHAIR: Rao Appadu (ROOM 1)		
9:30 – 9:50	<u><i>Yunlong Yu and Guangwei Yuan</i></u>	A conservative finite volume scheme preserving maximum principle for diffusion equations
9:50 – 10:10	<u><i>A. Mishra, A. De and D. Mukherjee</i></u>	Passive Control of Bifurcation Phenomenon in Sudden Expansion Flow
10:10 – 10:30	<u><i>Rachid Bannari, Ghizlane Zineb Hliwa, Abdelfettah Bannari and Mly Taib Belghiti</i></u>	The prediction of the cavitation phenomena including population balance modeling
10:30 – 10:50	<u><i>A. I. Bosioc, A. Stuparu and R. Susan-Resiga</i></u>	Numerical Analysis of Temperature and Torque in A Magneto-Rheological Clutch

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	<u><i>J. Diblík</i></u>	Exponential Stability of Linear Discrete Systems with Nonconstant Matrices and Nonconstant Delay
09:20 – 09:45	<u><i>J. Bařtinec,</i></u> <i>J. Diblík,</i> <i>M. Klimeřová</i>	Large-time Behavior of a Class of Positive Solutions of Discrete Equation
09:45 – 10:10	<u><i>Z. Svoboda,</i></u> <i>J. Diblík</i>	The Solutions of Second-order Linear Differential Systems with Constant Delays
10:10 – 10:35	<u><i>M. Huřek,</i></u> <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	<u><i>P. Král,</i></u> <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><u>Alina Gleska and Malgorzata Migda</u></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

20 September 2016 SESSION: Symposium on High Performance Computing in Engineering and Environmental Sciences CHAIR: Radim Blaheta (ROOM 9)		
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. Stary, 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</u>, Jan Kočí, Jiří Maděra, Pavel Beran 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 Koňáková</u>, Eva 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><u><i>Adrian Sandu</i></u></p>	<p>General Linear Methods and friends: toward efficient solutions of multiphysics problems</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 and L. Rández</u></i></p>	<p>Fourier Methods for Oscillatory Differential Problems with a Constant High Frequency</p>

20 September 2016
**The 11th International Symposium on Numerical Analysis of Fluid Flow,
Heat and Mass Transfer**
Numerical Fluids 2016
CHAIR: Mihai Niculescu
(ROOM 1)

15:00 – 15:20	<i><u>Q.M. AlMdallal</u></i>	Preliminary Results on Flow Past a Circular Cylinder Undergoing Circular Motion: Oscillation Amplitude Effect
15:20 – 15:40	<i><u>S.V. Bogovalov, V.D. Borman, V.D. Borisevich, V.N. Tronin and I.V. Tronin</u></i>	Numerical modeling and optimization of the Iguassu gas centrifuge
15:40 – 16:00	<i><u>A. De and P. Das</u></i>	Investigation of flow structures in supersonic flow with mass injection
16:00 – 16:20	<i><u>O. Kocaaslan, M. Ozgoren, O. Babayigit and M.H. Aksoy</u></i>	Numerical Investigation of the Effect of Number of Blades on Centrifugal Pump Performance
16:20 – 16:40	<i><u>Andrzej Kasperek and Piotr Lapka</u></i>	Parallelization of a coupled Immersed Boundary and Lattice Boltzmann Method for fluid and heat flow
16:40 – 17:00	<i><u>Henrik Strom and Dia Zeidan</u></i>	On the Robustness of Two-Phase Flow Models for Bubbly Flows

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	

<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: Malgorzata Migda</p> <p style="text-align: center;">(ROOM 5)</p>		
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>I.N.CANGÜL</i></u>	New Formulae for Zagreb Indices
15:00 – 15:30	<u><i>E.ÇETİN</i></u>	Some Properties Of The Sum $C_1(h; k)$
15:30 – 16:00	<u><i>K.E.BİCER</i></u>	Numerical solutions for Helmholtz Equations using Bernoulli polynomials
16:00 – 16:30	<u><i>S.ÖZTÜRK</i></u>	More Fibonacci Numbers Arising From The Suborbital Graphs For The Congruence Subgroup $\Gamma_0(n/h)$
16:30 – 17:00	<u><i>D.KURICHININ</i></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. Seïça, 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

<p style="text-align: center;">20 September 2016</p> <p style="text-align: center;">SYMPOSIUM 56: Title: III Symposium on Symmetry Methods and Applications to Differential Equations</p> <p style="text-align: center;">CHAIR: Maria Luz Gandarias and Maria Santos Bruzon (ROOM 2)</p>		
17:30 – 18:00	<u><i>Masood Khalique</i></u>	Solutions and conservation laws for a Kaup-Boussinesq system
18:00 – 18:30	<u><i>Maria Luz Gandarias</i></u>	On conservation laws for a generalized Boussinesq equation
18:30 – 19:00	<u><i>Maria Santos Bruzon</i></u>	Conservation laws and potential systems for a generalized thin film equation
19:00 – 19:30	<u><i>Georgy Burde</i></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><i>Isaiah Mhlanga</i></u>	Symmetry analysis and conservation laws of a generalized (2+1)-dimensional Burgers-Kadomtsev-Petviashvili equation

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,</u> Mohd Al-Refai, Qasem Al-Mdalllaql	Numerical method or solving a class of Second order fractional Sturm-Liouville eigenvalue problems
18:00 – 18:30	<u>Qasem Al-Mdallal,</u> Muhammed Syam, Ahmed S. Abu Omer	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	<u>Rostislav I.</u> <u>Nepershin</u> <u>Maksim A.</u> <u>Prusakov</u>	Half-Spherical Shell Deep Drawing
19:35 – 20:05	<u>Rostislav I.</u> <u>Nepershin</u>	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 Baštinec (ROOM 4)		
17:30 – 18:00	<u>Z. Kala</u>	Identification of Stochastic Interactions in Nonlinear Models of Structural Mechanics
18:00 – 18:30	<i>G. Nečasová, F. Kocina, P. Veigend, J. Chaloupka, V. Šátek, <u>J. Kunovský</u></i>	Solving Wave Equation Using Finite Differences and Taylor Series
18:30 – 19:00	<i>J. Chaloupka, F. Kocina, P. Veigend, G. Nečasová, <u>J. Kunovský</u>, V. Šátek</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	<u>Sibel Dođru Akçöl</u> and <i>Agacık Zafer</i>	“A Fixed Point Approach to Singular Impulsive Boundary Value Problems”

<p style="text-align: center;">20 September 2016 SESSION: General Session CHAIR: Zehra Pinar (ROOM 5)</p>		
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 Pinar</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
20:00 – 20:30	<i><u>Svilen S. Valtchev</u> and Carlos J. S. Alves</i>	Applying the Method of Fundamental Solutions to Harmonic Problems with Singular Boundary Conditions
20:30 – 21:00	<i>Ömür Deveci</i>	The Padovan-Pell-Slyvester Sequences and their Applications
21:00 – 21:30	<i><u>Erdal Karaduman</u> and Ömür Deveci</i>	The Recurrence Sequences via Sylvester Matrices

<p>20 September 2016</p> <p>SESSION:#59:5th Generating Functions of Special Numbers and Their Applications</p> <p>Organizer: YILMAZ SIMSEK</p> <p>CHAIR: Ahmet YARDIMCI</p> <p>(ROOM 6)</p>		
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: Mathematical Methods in Economics and Engineering CHAIR: Ludovic Dan LEMLE (ROOM 7)		
17:30 – 17:45	<u>Jiri Hozman,</u> <u>Tomas Tichy</u>	On the Discontinuous Galerkin Method for Numerical Pricing of Basket Spread Options with the Average Strike
17:45 – 18:00	<u>Justyna Orwat, Ryszard Mielimęka</u>	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>Justyna Orwat</u>	Approximation of Average Course of Measured Subsidences of Mining Area by Smooth Splines
18:45 – 19:00	<u>Ryszard Mielimęka,</u> <u>Justyna Orwat</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>Miruna Magaon, Erika Ardelean, Sorina Œerban, Vasile Puşan</u>	Mathematical Modeling of the Removal Efficiency of Hydrogen from Steels Treated in Vacuum Facilities
19:45 – 20:00	<u>Miruna Magaon, Mihail Vătăşescu, Teodor Hepuş, Eugen Crişan</u>	The Optimization of the Removal Process of Nitrogen Content from Steels Treated in Vacuum Facilities
20:00 – 20:15	<u>Corneliu Birtok-Băneasă, Sorin Aurel Raşiu, Teodor Hepuş</u>	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, M. AlMheidat</i>	Generalized Gegenbauer Koornwinder's type polynomials change of bases
20:30 – 21:00	<i>M. AlMheidat, M. AlQudah</i>	Characterization of generalized Jacobi Koornwinder's type polynomials

20 September 2016 Symposium 47: Statistical Inference in Copula Models and Markov Processes CHAIR: V.A. González-López (ROOM 9)		
17:30 – 18:00	<i><u>Jesús E. García, V. A. González-López and F. H. Kubo de Andrade</u></i>	Dissimilarity between Markovian Processes applied to Industrial Processes
18:00 – 18:30	<i><u>M. Fernández, V. A. González-López and B. S. Hergert</u></i>	Prediction through a Gumbel Barnett Copula
18:30 – 19:00	<i><u>M. Fernández, Jesús E. García, V. A. González-López and N. Romano</u></i>	Right Tail Increasing Dependence between Scores
19:00 – 19:30	<i><u>Jesús E. García and V. A. González-López</u></i>	Open Problems

END OF THE 2ND DAY

21 September 2016
**The 11th International Symposium on Numerical Analysis of Fluid Flow, Heat
and Mass Transfer**
Numerical Fluids 2016
CHAIR: Henrik Strom
(ROOM 1)

9:00 – 10:00	Invited lecture Professor Ned Djilali Lattice-Boltzmann Simulation of Multi-Phase Phenomena Related to Fuel Cells	
10:00 – 10:20	<u><i>A. R. Appadu</i></u>	Some novel numerical schemes for 1-D Korteweg-de-Vries Burger's equation
10:20 – 10:40	<u><i>Z. Chara, J. Dolansky and B. Kysela</i></u>	Saltation movement of large spherical particles
10:40 – 11:00	<u><i>Milan Kucharik and Mikhail Shashkov</i></u>	Bound-Preserving Remapping of Staggered Quantities for Multi-Material ALE Methods

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

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

<p align="center">21 September 2016</p> <p align="center">SESSION: Difference & Differential Equations and Applications</p> <p align="center">CHAIR: Mehdi Benabdallah</p> <p align="center">(ROOM 5)</p>		
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>Afonso Fernando Tsanzana</i>	“A comparison of the roughness regimes in hydrodynamic lubrication”
10:00 – 10:30	<i>Mehdi Benabdallah</i>	“The general Liapounov Equation for a pencil of operators and its applications”
10:30 – 11:00	<i>Vladimir Vasilyev</i>	“On discrete pseudo-differential equations and boundary value problems”

<p align="center">21 September 2016</p> <p align="center">SESSION: Multiscale-Multiphysics Approaches for Engineering Applications</p> <p align="center">CHAIR: Gabriele Pozzetti</p> <p align="center">(ROOM 7)</p>		
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	

<p>21 September 2016</p> <p>SESSION: The 2nd International Symposium on Artificial, Biological and Bio-Inspired Intelligence (ABBII)</p> <p>CHAIR: Tomohiro Shirakawa, Hiroshi Kawakami , Hiroshi Sato (ROOM 8)</p>		
09:00 – 09:05	Opening Remarks	
09:05 – 09:30	<u><i>Hiroshi Kawakami</i></u>	Bio-inspired Nourishing Relationship Between Human and Systems
09:30 – 09:55	<u><i>Ibidun Christiana Obagbuwa</i></u>	Adaptive cockroach swarm optimization
09:55 – 10:20	<u><i>Tomohiro Shirakawa, Hiroshi Sato and Imao Tomoya</i></u>	Analysis on How Gestures Affect the Students: Comparative Experiments using Identical Class Presentations Conducted by a 3D Anthropomorphic Agent
10:20 – 10:45	<u><i>Naruhisa Sugiyama and Tomohiro Shirakawa</i></u>	Development of iPad application “Postima” for Quantitative Analysis on the Effects of Manual Therapy
10:45 – 11:10	<u><i>Andrew Schumann</i></u>	p-Adic Valued Models of Swarm Behaviour

21 September 2016 SESSION: General Session CHAIR: Ch. Tsitouras (ROOM 10)		
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	<i>Gustavo Franco Reynoso, Sigal Gottlieb and <u>Zachary J. Grant</u></i>	Strong Stability Preserving Sixth Order Two-Derivative Runge–Kutta Methods
11:30 – 12:00	Coffee Break	

21 September 2016 SESSION: INVITED SPEAKER CHAIR: Hans Munthe-Kaas (ROOM 1)		
11:30 – 12:30	<u>Chi-Wang Shu</u>	IMEX Time Marching for Discontinuous Galerkin Methods

21 September 2016 SESSION: INVITED SPEAKER CHAIR: Chi-Wang Shu (ROOM 1)		
12:30 – 13:30	<u>Hans Munthe-Kaas</u>	Butcher's B-series, a Gemstone of Mathematics

<p style="text-align: center;">21 September 2016</p> <p style="text-align: center;">The 11th International Symposium on Numerical Analysis of Fluid Flow, Heat and Mass Transfer</p> <p style="text-align: center;">Numerical Fluids 2016</p> <p style="text-align: center;">CHAIR: Zdenek Chara</p> <p style="text-align: center;">(ROOM 1)</p>		
15:00 – 15:20	<i>Xuezhe Liu, Zhong Lin and Ruili Wang</i>	Cell-centered Diffusion Schemes for Lagrangian Radiation Hydrodynamics on Nonmatched Polygonal Meshes
15:20 – 15:40	<i>Tomáš Neustupa</i>	A Mathematical Model of a Steady Flow Through the Kaplan Turbine – the Existence of a Weak Solution in the Case of an Arbitrarily Large Inflow
15:40 – 16:00	<i>S. I. Bernad, A. I. Bosioc, A. F. Totorean, I. Petre and E.S. Bernad</i>	Wall Shear Stress Evolution in Carotid Artery Bifurcation
16:00 – 16:20	<i>Mirosław Seredynski and Piotr Lapka</i>	Front tracking based modeling of the solid grain growth on the adaptive control volume grid
16:20 – 16:40	<i>H. Fadhila, H. Medina, A. Beechook, S. Aleksandrova and S. Benjamin</i>	Evaluation of Transition-Sensitive Eddy-Viscosity Turbulence Models for Separated Flow in OpenFOAM

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><i>Mihai Mihaila-Andres</i></u>	Aeroelastic Tailoring of Composite Aircraft Wings
15:30 – 16:00	<u><i>Dumitru Pepelea</i></u>	CFD analysis of a Darrieus wind turbine
16:00 – 16:30	<u><i>Mihai-Victor Pricop</i></u>	Truss systems size and shape optimization
16:30 – 17:00	<u><i>Mihai-Leonida Niculescu</i></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><i>Young Cao</i></u>	Hybrid ODE/SSA Methods and the Cell Cycle Model
15:30 – 16:00	<u><i>Min Roh</i></u>	Data-driven initialization of SParse
16:00 – 16:30	<u><i>Shengtai Li</i></u>	An L-Stable Method for Solving Stiff Hydrodynamics
16:30 – 17:00	<i>Brian Drawert, Nimish Thakore, Brian Mitchell, Erik Pioro, John Ravits and <u>Linda R. Petzold</u></i>	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</p> <p>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: The 2nd International Symposium on Artificial, Biological and Bio-Inspired Intelligence (ABBII) CHAIR: Tomohiro Shirakawa, Hiroshi Kawakami , Hiroshi Sato (ROOM 8)		
15:00 – 15:25	<i><u>Hidetaka Taniguchi,</u></i> <i>Hiroshi Sato and Tomohiro Shirakawa</i>	Application of Human Cognitive Mechanism to Naïve Bayes Text Classifier
15:25 – 15:50	<i>Kuratomo Oyo and <u>Tatsuji Takahashi</u></i>	Optimization Through Satisficing with Prospects
15:50 – 16:15	<i><u>Tomohiro Shirakawa,</u></i> <i>Hiroshi Sato and Hiroto Tsubakino</i>	Bifurcation in the Chemotactic Behavior of <i>Physarum</i> Plasmodium
16:15 – 16:40	<i><u>Andrew Schumann and</u></i> <i>Krzysztof Panczer</i>	PhysarumSoft: an Update Based on Rough Set Theory
16:40 – 16:45	Closing Remarks	

21 September 2016 SESSION: General Session CHAIR: Michal Benes (ROOM 9)		
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 <u>K.C. Patidar</u></i>	Fitted Fourier-Pseudospectral Methods for Solving A Delayed Reaction-Diffusion Partial Differential Equation in Biology

<p style="text-align: center;">21 September 2016 SESSION: General Session CHAIR: Adam J. Zakrzewski (ROOM 10)</p>		
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>

21 September 2016
SESSION 11: Statistics and Modelling
CHAIR: Václav Adamec
(ROOM 5)

17:30 – 17:50	<i>Karl Moder</i>	Effects of Violations of Prerequisites in Sequential Triangular Designs
17:50 – 18:10	<i>Václav Adamec</i>	Power of Heteroskedasticity Tests in Presence of Various Types of Skedastic Function and Sample Size
18:10 – 18:30	<i>Jan Mašek</i>	Parallelized Implementation Of Dynamical Particle System
18:30 – 18:50	<i>Miroslav Vořechovský</i>	Evaluation of pairwise distances among orthogonal grid points in hypercube
18:50 – 19:10	<i>Li Heling</i>	A Mechanism Producing Power Law Distribution
19:10 – 19:30	<i>Hongjun Shen</i>	The New Finite Temperature Schrödinger Equations with Strong or Weak Interaction
19:30 – 19:50	<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

22 September 2016 SESSION: INVITED SPEAKER CHAIR: Luigi Brugnano (ROOM 1)		
09:30 – 10:30	<u><i>Linda R. Petzold</i></u>	The Emerging Roles and Computational Challenges of Stochasticity in Biological Systems

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

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

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</u> <i>Djordje Herceg</i>	Metadata Specification in a Dynamic Geometry Software
10:15 – 10:40	<i>Danijel Živanov,</i> <u>Danijela Boberić-</u> <u>Krstićev and</u> <i>Duško Mirković</i>	Usage of Data Warehouse for Analysing Software's Bugs
10:40 – 11:00	<u>Zoran Budimac and</u> <i>SCLIT team</i>	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

23 September 2016
The 11th International Symposium on
Numerical Analysis of Fluid Flow, Heat and Mass Transfer
Numerical Fluids 2016
CHAIR: Alin Totorean
(ROOM 1)

9:30 – 9:50	<i><u>Ghizlane Zineb Hliwa,</u></i> <i><u>Rachid Bannari and Mly</u></i> <i><u>Taib Belghiti</u></i>	Impact of the initialisation on population balance CFD models coupled with two-phase flow
9:50 – 10:10	<i><u>Wenzhou Lin,</u></i> <i><u>Zhong Lin</u></i> <i><u>and Quan Liu</u></i>	Numerical Test of the Open Void Method of Slide Line with Unstructured Polygon Grids
10:10 – 10:30	<i><u>E. Aslan,</u></i> <i><u>Y. Ozturk,</u></i> <i><u>and S. Dileroglu</u></i>	Decreasing the Exhaust Outlet Temperatures on a Class III Bus with the Lowest Impact on the Exhaust Backpressure and the Fuel Consumption
10:30 – 10:50	<i><u>Mari G. Christiansen,</u></i> <i><u>Ann Elin Berg,</u></i> <i><u>Boris V. Balakin</u></i> <i><u>and Pawel Kosinski</u></i>	Numerical and experimental analysis of particle dispersion in dust explosions

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)		
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	

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

23 September 2016 SESSION: Recent Advances in Numerical Methods and Simulations in Statics and Dynamics of Structures CHAIRS: Juraj Králik, Eva Kormaníková (ROOM 4)		
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	

<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. Szczęśna and A. Wiliński (ROOM 5)</p>		
<p>Sub-session chairs: R. Kozera 09:00 – 09:30</p>	<p><i>R. Kozera, L. Noakes M. Wilkołazka</i></p>	<p>Complete Spline Interpolation and Exponential Parameterization for Length Estimation of Curves</p>
<p>09:30 – 10:00</p>	<p><i>A. Michalczuk, K. Wereszczyński, R. Mucha, A. Świtoński, H. Josiński, K. Wojciechowski</i></p>	<p>Evaluation of Human Dynamic Balance in Grassmann Manifold</p>
<p>10:00 – 10:30</p>	<p><i>K. Wereszczyński, A. Michalczuk, M. Staniszewski, H. Josiński, A. Świtoński, K. Wojciechowski</i></p>	<p>Metric Tensor for Riemannian Classifier</p>
<p>10:30 – 11:00</p>	<p><i>A. Szczęśna, M. Błaszczyszyn</i></p>	<p>Quantitative Analysis of Arm Movement Smoothness</p>
<p>11:00 – 11:30</p>	<p>Coffee Break</p>	

<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	

<p style="text-align: center;">23 September 2016 SESSION: General Session CHAIR: Vladislav N. Kovalnogov (ROOM 7)</p>		
09:00 – 09:30	<u>Vladislav N. Kovalnogov</u> , Ruslan V. Fedorov, Mikhail S. Boyarkin	Method of Calculation of a Thermolysis and Friction of a Turbulent Disperse Flow in Nozzles
09:30 – 10:00	<u>Vladislav N. Kovalnogov</u> , Ruslan V. Fedorov, Larisa V. Khakhaleva, Andrey V. Chukalin, Aleksandr A. Bondarenko, Evgeny N. Kovrizhnykh	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> , Ruslan V. Fedorov, Larisa V. Khakhaleva, Aleksandr N. Zolotov	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> , Ruslan V. Fedorov, Yuri A. Khakhalev, Larisa V. Khakhaleva, Andrei V. Chukalin	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 Symp. 102: Symposium on Statistical Models, Methodologies and applications – POSTER PROJECTION CHAIR: Teresa A. Oliveira (ROOM 8)		
09:30 – 09:40	<i>Dário Ferreira, Sandra S. Ferreira, Célia Nunes, <u>Teresa A. Oliveira</u> and João T. Mexia</i>	Confidence intervals for variance components in gauge capability studies
09:40 – 09:50	<i><u>Carla Francisco</u>, Steven G. Cumming, Teresa A. Oliveira</i>	Statistical Modelling: Fire Blow-Up
09:50 – 10:00	<i>Sandra Nunes, <u>Teresa A. Oliveira</u> and Amílcar Oliveira</i>	Item Response Theory – a first approach
10:00 – 10:10	<i>Sandra Nunes, <u>Teresa A. Oliveira</u> and Amílcar Oliveira</i>	Problem Based Learning – a brief review
10:10 – 10:30	<i><u>Jersy Filus</u> and Lidia Filus</i>	A general method for construction of bivariate probability distributions given any continuous marginals
10:30 – 10:40	<i><u>Teresa A. Oliveira</u> Amitava Mukherjee,</i>	Multivariate Control Charts: Exploring the rule of Hotelling's T^2
10:40 – 10:50	<i><u>Raquel Oliveira</u>, A. Manuela Gonçalves, and Rosa M. Vasconcelos</i>	A Negative Binomial Model for Student Allocation to Higher Education in Portugal during the Post-Bologna Period.
10:50 – 11:00	<i><u>A. Manuela Gonçalves</u>, Olexandr Baturin, and Marco Costa</i>	Time Series Analysis by State Space Models Applied to a Water Quality Data in Portugal

23 September 2016 SESSION: 3rd Symposium on Modelling and Simulation in Computer Sciences and Engineering (MSCSE 2016) CHAIR: Sandra Aleksiene (ROOM 9)		
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	

<p>23 September 2016</p> <p>SESSION: INVITED SPEAKER</p> <p>CHAIR: Mayya Tokman</p> <p>(ROOM 1)</p>		
<p>11:30 – 12:30</p>	<p><i><u>Philippe Chartier,</u></i> <i>Nicolas Crouseilles,</i> <i>Florian Méhats and</i> <i>Mohammed Lemou</i></p>	<p>An averaging technique for kinetic equations</p>

<p>23 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><u>Steve Ruuth and</u></i> <i>Argyrios Petras</i></p>	<p>An embedding method for partial differential equations on moving surfaces</p>

23 September 2016
**The 11th International Symposium on Numerical Analysis of Fluid Flow,
Heat and Mass Transfer**
Numerical Fluids 2016
CHAIR: Milan Kucharik
(ROOM 1)

15:00 – 15:20	<i>M. L. Niculescu, M. G. Cojocaru, M. V. Pricop, M. C. Fadgyas, D. Pepelea and M. G. Stoican</i>	A New Computational Method for Reacting Hypersonic Flows
15:20 – 15:40	<i>A. R. Appadu, J. K. Djoko and H. H. Gidey</i>	Comparative study of some Numerical Methods to solve a 3D Advection-Diffusion Equation
15:40 – 16:00	<i>Wael Al-Kouz, Maen Sari, Suhil Kiwan and Ammar Alkhalidi</i>	Similarity solution for a rarefied flow over a stretched surface
16:00 – 16:20	<i>Kartushinsky, Boris V. Balakin, Kirill V. Kutsenko, Pawel Kosinski</i>	Numerical study of gas-liquid flow morphology in a vertical flowmeter nozzle
16:20 – 16:40	<i>Jens Gräbel, D. Zeidan, P. Bähr, P. Ueberholz and P. Farber</i>	Progress on the Simulation of a Mixture Two-Phase Flow Model
16:40 – 17:00	<i>Seyedamirreza Modarreszadeh, Evgeny Timofeev, Alain Merlen, Olivier Bou Matar and Philippe Pernod</i>	Numerical Simulation of Magneto-Acoustic Wave Phase Conjugation with the DG Method in the CPR Framework

<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>		
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. Popov,</i></u> <u><i>D.A. Gerasimov</i></u>	Resonance state completeness problem for quantum graph
15:20 – 15:40	<u><i>G.S. Makeeva, O.A. Golovanov, 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 and Current Research on the Difference Equations and its Applications CHAIR: Seifedine Kadry (ROOM 3)		
16:05 – 16:35	<i>Jerzy Klamka, Radosław Zawiski and Michał Niezabitowski</i>	On some recent results in the exact controllability of second order infinite dimensional semilinear deterministic systems

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, Kamila Kotrasová</i>	Delamination Modeling of Laminate Plate Made of Sublaminates
15:30 – 16:00	<i>Martin Psotný</i>	Equilibrium Paths of an Imperfect Plate with Respect to Its Aspect Ratio
16:00 – 16:30	<i>Martin Psotný, 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: Adriano Montanaro (ROOM 7)		
15:00 – 15:30	<i>Haci Mehmet Baskonus, Gülnur Yel, Hasan Bulut</i>	New Exponential Wave Behaviors to the Fractional Zakharov-Kuznetsov-Benjamin-Bona-Mahony Equation
15:30 – 16:00	<i>Haci Mehmet Baskonus, Dilara Altan Koç, Mustafa Gülsu, Hasan Bulut</i>	New wave simulations to the (3+1)-dimensional Modified KdV-Zakharov-Kuznetsov Equation
16:00 – 16:30	<i>Dawid Barnas and Lesław K. Bieniasz</i>	SSE-based Thomas Algorithm for Quasi-Block-Tridiagonal Linear Equation Systems, Optimised for Small Dense Blocks

<p style="text-align: center;">23 September 2016</p> <p style="text-align: center;">SESSION: Operational Research and Applications</p> <p style="text-align: center;">CHAIR: Flávio Ferreira</p> <p style="text-align: center;">(ROOM 2)</p>		
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 Kadilar 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
<i>Adriano Montanaro</i>	Constitutive Restrictions for Deformable Simple Media that are Heat Conducting and Electrically Polarizable

END OF THE 5TH DAY

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)		
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 (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. Juszczak</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, <u>E. A. Mazur</u></i>	Metal Hydrogen Sulfide Superconducting Temperature Calculation
09:20 – 09:40	<i>K.A. Alhussan, <u>A.V. Teterev</u></i>	Simulation of Combustion Products Flow in the Laval Nozzle in the Software Package SIFIN
09:40 – 10:00	<i><u>A.V. Teterev</u>, 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><u>P.N. Ryabov</u></i>	The Features of Plastic Flow Localization in Materials Under Shear Deformations
10:20 – 10:40	<i><u>D.I. Sinelshchikov</u></i>	On connections of the Liénard-type equations with type II Painlevé-Gambier equations
10:40 – 11:00	<i><u>Marco Berci</u></i>	Effect of Cubic Aeroelastic Nonlinearities on Flutter
11:00 – 11:30	Coffee Break	

<p style="text-align: center;">24 September 2016</p> <p style="text-align: center;">SESSION: Analytical and Numerical Methods for Mathematical Models in Applied Sciences</p> <p style="text-align: center;">CHAIR: Maria P. Speciale and Marianna Ruggieri (ROOM 5)</p>		
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 Aghezzaf and Veronique Limere</i>	Simulation Modeling for End-of-Aisle Automated Storage and Retrieval System
13:00 – 13:30	<i>Sema YAYLA</i>	Regularity of the Global Attractor for the Plate Equation with Nonlocal Nonlinearity in \mathbb{R}^n

<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

24 September 2016 SESSION: 4rd Symposium on Decision Support Systems in Construction Management CHAIR: Edyta Plebankiewicz, Dariusz Skorupka (ROOM 3)		
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
13:45 – 14:00	<i>Barbara Gładysz and Dorota Kuchta</i>	Mixtures of Beta Distributions in Models of the Duration of a Project Affected by Risk
Lunch Break		

24 September 2016 SESSION: Methods of Nonlinear Mathematical Physics CHAIR: Nikolay Kudryashov (ROOM 4)		
11:30 – 11:50	<i>Sebastien Tremblay</i>	On a quaternionic Riccati equation and its symmetries
11:50 – 12:10	<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
12:10 – 12:30	<i><u>N.A. Kudryashov</u>, A.K. Volkov</i>	Concatenons as the solutions for non-linear partial differential equations.
12:30 – 12:50	<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	

24 September 2016 SESSION: General Session CHAIR: Alibek Issakhov (ROOM 4)		
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

24 September 2016 SESSION: General Session CHAIR: Vladimir Popov (ROOM 5)		
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

24 September 2016 SESSION: General Session CHAIR: Robert Gold (ROOM 6)		
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
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 Chaudry Masood Khalique</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 Jorge Stolfi</i>	General Algorithms for Multiscale Approximation
19:00 – 19:30	<i>Kagiso Mpshe, 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

24 September 2016 SESSION: General Session CHAIR: Alexandr Tarasyev, Jr. (ROOM 7)		
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>Gurban Inessa and Tarasyev Alexandr, Jr.</i>	The Indicative Analysis and Ranking of Human Capital Development
18:30 – 19:00	<i>Tarasyev Alexandr and Tarasyev Alexandr, Jr.</i>	The Gravity Model of Labor Migration Behavior

END OF THE 6TH DAY

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: Vaclav Skala (ROOM 1)</p>		
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	<i><u>Sinan ÖZTAŞ</u>, Gökay AKKAYA</i>	Priority Determination for Reintegration of Disaster Victims into Society after Disaster using Stochastic AHP and Stochastic MOORA Approaches
09:30 – 10:00	<i>Gökhan YURDAKUL, Vecihi YİĞİT</i>	MEASUREMENT AND ANALYSIS OF MENTAL WORK LOAD OF UNIVERSITY ACADEMIC STAFF: AN APPLICATION WITH NASA-TLX
10:00 – 10:30	<i>Alexander Spivak</i>	One Problem of Scheduling Multiple Mobile Agents in the Network
10:30 – 11:00	<i><u>Ecem Acar</u>, Selman Uguz and Hasan Akın</i>	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: 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	

<p style="text-align: center;">25 September 2016 SESSION: General Session CHAIR: P. Burkov (ROOM 1)</p>		
11:30 – 12:00	<i>AZIEZ Siham 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>P Burkov, Wu Chun, V Burkov, Burkova</i>	FEM Analysis of Soil-Pipe Interaction

<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 R ³ with Examples
12:00 – 12:30	<i>Askar Dzhumadil'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>Edxon Meneses, 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

25 September 2016 SESSION: General Session CHAIR: G. Sutmann (ROOM 3)		
11:30 – 12:00	<i><u>Kamil ARSLAN</u> and <u>Oğuz TURGUT</u></i>	Forced Convection Fluid Flow Characteristics of R600a/Al ₂ O ₃ Nanorefrigerant
12:00 – 12:30	<i><u>Shaotao Zhu, Jing Li and Weihu Cheng</u></i>	Hypernormal Form of a Laminated Composite Plate Dynamical Model
12:30 – 13:00	<i><u>G. Sutmann, H. Ganesan and C. Begau</u></i>	Cluster Formation in Stochastic Disk Systems
13:00 – 13:30	<i><u>Erik R. Prytz, Øyvind Huuse, Bernhard Müller, Jan Bartl and Lars Roar Sætran</u></i>	Numerical Simulation Of Flow Around The NREL S826 Airfoil At Moderate Reynolds Number Using Delayed Detached Eddy Simulation (DDES)

END OF THE 7TH DAY
END OF THE CONFERENCE