

The 14th International Conference on Mathematics and its Applications - ICMA 2015

PROGRAMME

WEDNESDAY - 04.11.2015

17.00 – 20.00: Registration 1 – Registration Office

THURSDAY - 05.11.2015

08.15 – 09.00: Registration 2 – Registration Office

09.15 – 09.30: Open Ceremony - Room 1

09.30 – 11.00: Plenary Lectures 1 - Room 1

Chairman: Dorian Popa

09.30 – 10.15: Janusz Brzdęk – *Ulam Type Stability and Fixed Points*

10.15 – 11.00: Ioan Raşa – *Positive Linear Operators, Entropies and Heun Functions*

11.00 – 11.30: Coffee Break - Room 108

11.30 – 13.00: Plenary Lectures 2 - Room 1

Chairman: Ioan Raşa

11.30 – 12.15: Elena Kulinskaya – *Meta-Analysis: Past, Present and Future*

12.15 – 13.00: Guillaume Aubrun – *Dvoretzky's Theorem and the Complexity of Entanglement Detection*

13.30 – 14.00: Lunch – Casa Politehnicii 2

14.15 – 15.00: Late Registration – Registration Office

15.00 – 16.45 – First afternoon parallel Session

Room 1 – Section 1: MATHEMATICAL ANALYSIS AND APPLICATIONS 1

Chairman: Daniela Inoan

- 15.00 – 15.15: Ibrahim Çanak, Ümit Totur - *Some classical Tauberian theorems for triple improper Integrals*
- 15.15 – 15.30: Anil, Sezer Sefa, Ibrahim Çanak - *Some Tauberian conditions for the logarithmic method of summability*
- 15.30 – 15.45: Ümit Totur, Ibrahim Çanak - *On Tauberian theorems for statistical weighted mean method of summability*
- 15.45 – 16.00: Erdem Yılmaz, Ibrahim Çanak - *Two theorems on the product of Abel and Cesaro summability methods*
- 16.00 – 16.15: Ali Muhammet Okur, Ümit Totur - *On logarithmic averages of sequences and its applications*
- 16.15 – 16.30: Bianca Satco - *Bounded variation functions – applications to measure differential equations*
- 16.30 – 16.45: Gabriela Raluca Mocanu - *C_0 -semigroups generated by second order differential operators Hormander representation - Applications in physics*

Room 2 – Section 6: WORKSHOP ON DYNAMICAL SYSTEMS AND THEIR APPLICATIONS 1, Chairman: Gheorghe Țigan

- 15.00 – 15.15: Qiuyan Zhang, Gheorghe Țigan, Weinian Zhang - *Dynamics of an extended Lorenz system*
- 15.15 – 15.30: Zhiheng Yu, Weinian Zhang - *Conditions for Polynomial Lienard Centers*
- 15.30 – 15.45: Jiyu Zhong - *Bifurcations of a second-order difference equation related to a class of reaction-diffusion equations*
- 15.45 – 16.00: Limin Zhang, Chaofeng Zhang, Min Zhao - *Dynamic complexities in a discrete predator-prey system with lower critical point for the prey*
- 16.00 – 16.15: Zhiming Zhou, Gheorghe Tigan, Zhiheng Yu - *Hopf bifurcations in an extended Lorenz*
- 16.15 – 16.30: Șerban Vlad - *On some invariance properties of the asynchronous flows*
- 16.30 – 16.45: Katarina Kukić - *Algorithm for searching separation variables in the Kowalevski type systems*

16.45 – 17.15 – Coffee Break - Room 108

17.15 – 19.15 – Second afternoon parallel Session

Room 1 – Section 1: MATHEMATICAL ANALYSIS AND APPLICATIONS 2,

Chairman: Heiner Gonska

- 17.15 – 17.30: Heiner Gonska - *Generalized Alomari functionals*

17.30 – 17.45: Margareta Heilmann - *Commutativity properties of genuine Baskakov-Durrmeyer type operators and their k -th order Kantorovich modification*

17.45 – 18.00: Nursel Çetin - *Approximation by complex modified genuine Szász-Durrmeyer-Stancu operators*

18.00 – 18.15: Gülen Başcanbaz-Tunca - *Convergence in variation for Bernstein-type operators*

18.15 – 18.30 Özlem Öksüzer - *On convergence of Bernstein-Stancu polynomials in the variation seminorm*

18.30 – 18.45: Daniela Inoan - *Bernstein operators of second kind and blending systems*

18.45 – 19.00: Ana Maria Acu - *A note on approximation properties of Bernstein Stancu type operators*

19.00 – 19.15: Voichița Radu - *Iterates of q -Bernstein operators, via contraction principle*

Room 2 – Section 4: Probability and Statistics, Applications in Health and Clinical Research, **Chairman: Zsolt Karacsony**

17.15 – 17.30: Takeshi Matsuda - *On the Consideration of Time Series Analysis of Tacit Knowledge in Nursing Art*

17.30 – 17.45: Mario Lefebvre - *Suboptimal solutions to LQG homing problems*

17.45 – 18.00: Zsolt Karacsony - *Kernel type estimator of a bivariate average growth function*

18.00 – 18.15: Jelena Stanojevic - *Asimptotic behavior of the tail index estimators*

18.15 – 18.30: Romeo Negrea - *An alternative approach for the assets pricing in unstable financial Markets*

18.30 – 18.45: Marius Ardelean, Simona Tămășan, Diana Lungeanu - *Causes and consequences of hip fracture in the elderly of Western Romania – a critical review of the study design*

18.45 – 19.00: Ioan Golet - *Fixed Point Theorems in Fuzzy Metric Spaces*

Room 3 – Section 5: WORKSHOP ON MATHEMATICAL METHODS IN QUANTUM INFORMATION THEORY, **Chairman: Guillaume Aubrun**

15.00 – 15.45: Cécilia Lancien - *Asymptotic strength of necessary conditions for separability*

16:00-16:45: Clement Pellegrini - *On a special class of bipartite unitary operators*

17:00-17:45: Tristan Benoist - *Unitary matrices generating classical like completely positive trace preserving maps*

19.30 – Welcome Cocktail – Casa Politehnicii 2

FRIDAY - 06.11.2015

09.00 – 10.45: Plenary Lectures 3 - Room 1

Chairman: Corneliu Davidescu

09.00 – 09.15: Francisc Klepp at 75 years

Chairman: Janusz Brzdęk

09.15 – 10.00: Adrian Petrușel – *Applications of Some Fixed Point Theorems in R^m - Metric Spaces*

10.00 – 10.45: Justyna Sikorska – *Orthogonalities in the Theory of Functional Equations*

10.45 – 11.15: Coffee Break - Room 108

11.15 – 12.45: Plenary Lectures 4 - Room 1

Chairman: Ion Nechita

11.15 – 12.00: Michael M. Wolf – *(Un-)decidable Problems in Quantum Theory*

12.00 – 12.45: Zoran Obradovic – *Structured Regression in Evolving Complex*

13.15 – 13.45: Lunch – Casa Politehnicii 2

14.30 – 16.30 – First afternoon parallel Session

Room 1 – Section 1: MATHEMATICAL ANALYSIS AND APPLICATIONS 3

Chairman: Justyna Sikorska

14.30 – 14.45: Dorian Popa - *Hyers-Ulam stability of the linear difference equation*

14.45 – 15.00: Georgiana Pugna - *Hyers-Ulam stability of the second order linear differential equation*

15.00 – 15.15: Dan Dăianu - *A new functional equation for generalized polynomials and its stability*

15.15 – 15.30: Nutefe Kwami Agbeko - *Stability problems on some functional equations in lattice Environments*

15.30 – 15.45: Pál Burai - *Generalized Wright-convex functions*

15.45 – 16.00: Attila Háy - *On approximately (h,k) - convex functions*

16.00 – 16.15: Judit Makó - *On (c,a) – Jensen convex functions*

16.15 – 16.30: Kanhaiya Jha - *Fixed point results and its applied aspects in generalized metric spaces*

Room 2 – Section 6: WORKSHOP ON DYNAMICAL SYSTEMS AND THEIR APPLICATIONS, Chairman: Dana Constantinescu

14.30 – 14.45: Gabriel Prajitură - *Linear Chaos*

14.45 – 15.00: Gheorghe Țigan - *Bautin bifurcations in the T system*

15.00 – 15.15: Andre Fonseca, Jeferson Cassiano - *Multifractality in nonlinear neural dynamics*

15.15 – 15.30: Dana Constantinescu - *The study of some fractional versions of the transport equation. Applications in physics and economics*

15.30 – 15.45: Florian Munteanu - *A computational analysis of the Hamilton-Poisson structures of the Kermack-McKendrick SIR model*

15.45 – 16.00: Adela Ionescu - *Linearization and geometrical methods for prey-predator dynamical systems*

16.00 – 16.15: Cătălin Sterbeti - *Osserman generalized locally symmetric spaces with the generalized 2-nilpotent Jacobi operator*

16.30 – 17.00 – Coffee Break - Room 108

17.00 – 19.15 – Second afternoon parallel Session

**Room 1 – Section 1: MATHEMATICAL ANALYSIS AND APPLICATIONS 4
Chairman: Adrian Petrușel**

17.00 – 17.15: Erdal Gül - *On regularized trace formula of a differential operator with operator coefficients defined on a finite interval*

17.15 – 17.30: Damla Yaman, Selim Yavuz - *L- Weakly and M- Weakly Compacts Operators I*

17.30 – 17.45: Selim Yavuz, Damla Yaman - *L- Weakly and M- Weakly Compacts Operators II*

17.45 – 18.00: Omer Gök - *Reflexivity results of dual Banach module*

18.00 – 18.15: George Popescu - *Rhaly Operators and Statistical Boundedness*

18.15 – 18.30: Eduardo Serrano - *Approximate Solutions to Inverse Problems associates to Integral Operators using the Wavelet Transform*

18.30 – 18.45: Eduardo Serrano - *About detection of oscillation patterns in SEEG with wavelet's coefficients*

18.45 – 19.00: Nazife Erkurs Özcan - *Constrictors of Markov operators on KB-spaces*

Room 2 – Section 2: ALGEBRA and GEOMETRY, COMPUTER ALGEBRA SYSTEMS IN RESEARCH, Chairman: Damian Osajda

17.00 – 17.15: Djordje Baralić - *Extending Lebesgue and Knaster-Kuratowski-Mazurkiewicz theorems*

17.15 – 17.30: Tanja Stojadinović - *Eulerian subalgebras of combinatorial Hopf algebras*

17.30 – 17.45: Ioana Lazăr - *The Gromov hyperbolicity of 5/9-complexes*

17.45 – 18.00: Filiz Kanbay - *On the spacelike ruled weingarten surfaces*

18.00 – 18.15: Fatma Bulut - *Maurer-Cartan one-forms on Z_3 – Graded Quantum Group $GL_q(2)$*

18.15 – 18.30: Camelia Pop, Camelia Petrișor - *On the stabilization of an optimal control problem*

18.30 – 18.45: Emanuel Cismaș - *Euler-Poincare-Arnold equations on semi-direct products*

18.45 – 19.00: Gürbüz Serife Nevin - *Elastic line is exposed to static force field for null Cartan curves*

19.00 – 19.15: Gürbüz Serife Nevin - *Motion of curves according to Bishop 2-type frame in euclidean 3-spaces*

Room 3 – Section 5: WORKSHOP ON MATHEMATICAL METHODS IN QUANTUM INFORMATION THEORY, Chairman: Michael M. Wolf

14.30 – 15.15: Teiko Heinosaari - *Incompatibility breaking quantum channels*

15.30 – 16.15: Pasc Găvruta - *Fusion frames and operator-values frames for quantum information theory*

16.30 – 17.15: Dan Timotin - *The solution to the Kadison-Singer problem*

19.30 – Social Dinner – Casa Politehnicii 2

SATURDAY - 07.11.2015

09.00 – 11.00: Plenary Lectures 5 - Room 1

Chairman: Djordje Baralić

09.00 – 09.45: Damian Osajda - *Combinatorial nonpositive curvature: theory and applications*

09.45 – 10.30: David Reeb - *Tensor-stable positive maps*

10.30 – 11.00 : Coffee Break - Room 108

11.00 – 13.15: Morning parallel Sessions

Room 1 – Section 1: MATHEMATICAL ANALYSIS AND APPLICATIONS 5

Chairman: Gabriela Cristescu

11.00 – 11.15: Gabriela Cristescu, Muhammad Uzair Awan, Mihail Găianu - *Integral inequalities for strongly convex functions on co-ordinates*

11.15 – 11.30: Ilie Stan, Nicolae Cofan, Ciprian Hedrea, Dan Lupulescu - *On interpolation of locally convex couples with real methods*

- 11.30 – 11.45:** Laura Manolescu - *New results on frames for operators in Hilbert spaces*
- 11.45 – 12.00:** Tudor Bînzar, Cristian Lăzureanu - *On the Wold-Suciu-Slocinski type decompositions for commuting isometric semigroups*
- 12.00 – 12.15:** Călin Serban - *Three periodic solutions for discontinuous perturbations of the vector p -Laplacian operator*
- 12.15 – 12.30:** Codruța Stoica, Mihail Megan, Claudia Mihiț - *On (h,k) -trichotomy and (h,k) -splitting for cocycles of linear operators in Banach spaces*
- 12.30 – 12.45:** Larisa Biriș, Raluca Lolea - *On exponential dichotomy and exponential trichotomy of cocycles over semiflows*
- 12.45 – 13.00:** Mónika Szűcs - *A mathematical model of oncolytic virus therapy*
- 13.00 – 13.15:** Milici Constantin - *The last squares method for fractional equations*

Room 2 – Section 3: APPLIED MATHEMATICS IN ENGINEERING AND ECONOMICS, Chairman: László Pokorádi

- 11.00 – 11.15:** Bogdan Căruntu, Constantin Bota, Olivia Bundau - *Approximate solutions of nonlinear integro-differential equations of the mixed Volterra-Fredholm type*
- 11.15 – 11.30:** László Pokorádi - *Fuzzy failure modes and effects analysis with weighted summarized center of gravity defuzzification*
- 11.30 – 11.45:** Camelia Șchiopu - *Applications of the maximal dynamic network flow problem*
- 11.45 – 12.00:** Fatih Er - *Some Results and Applications of Nonstandard Theta Methods*
- 12.00 – 12.15:** Remus-Daniel Ene, Bogdan Căruntu - *Analytical investigations on the flow of Williamson fluid with power-law pressure dependent viscosity model: effect of the power-law parameter*
- 12.15 – 12.30:** Adina Juratoni, Olivia Bundău - *A growth model with a C.E.S. production function with physical and human capital*
- 12.30 – 12.45:** Sorin Lugojan - *Survey of topological methods in robotics*
- 12.45 – 13.00:** Ildiko Somogyi - *Stochastic fractal interpolation with random variable parameter.*

Room 4 – Section 5: WORKSHOP ON MATHEMATICAL METHODS IN QUANTUM INFORMATION THEORY, Chairman: David Reeb

- 11:00 – 11:45:** Dan Timotin - *The solution to the Kadison-Singer problem*
- 12:00 – 12:30:** Aurelian Isar - *Dynamics of quantum correlations in Gaussian open systems*

13.30 – 14.00: Lunch – Casa Politehnicii

15.30 - Excursion

- **Room 1** - Large Senate Room, Rectorat Building, **half first floor**;
- **Room 2** - Small Senate Room, Rectorat Building, **first floor**;
- **Room 3** - Library Building, ID-4 Room, **fourth floor**, Vasile Pârvan Street, no.2 B
- **Room 108** - Rectorat Building, **first floor**;
- **Registration Office** and **Room 4** are located in the Department of Mathematics, Rectorat Building, **second floor**
- **The Lunches, Welcome Cocktail** and **Social Dinner** will be held in the “Casa Politehnicii 2” Restaurant - Mihai Eminescu Street, No. 11
- **Rectorat Building** of the Politehnica University of Timișoara is located in Victoria Square, No. 2.

WIRELESS HOTSPOT

There is wireless internet within Rectorat building. Connection details:

SSID(network ID): UPT.eduroam

User name: quest.wifi01@upt.ro

Password: UPT.1920

Participants to ICMA 2015 who have an account on eduroam.org can connect to the above wireless network using their own credentials.