

Sapientia Hungarian University of Transylvania

6th International Conference on Mathematics and Informatics

September 7–9, 2017

Târgu Mureş/Marosvásárhely, Romania

Program

September 7, 8.00–14.30

- 8.00–12.00 Registration
8.00–8.45 Breakfast
8.45 Opening ceremony (room 230)

Plenary session (room 230)

Chairman: Zoltán Kátai

- 9.00–9.50 **Erika Ábrahám:** SMT Solving for Real Algebra
10–10.50 **Alberto Cabada:** Characterization of the Constant Sign of the Green's Functions related to Ordinary and Functional Differential Equations
10.50–11.30 Coffee break

Section A (room 230) -----

Chairman: Alberto Cabada

- 11.30–12.00 **F. Adrián F. Tojo:** Green's Functions of Partial Differential Equations with Involutions
12.00–12.30 **Lorand Gabriel Parajdi:** Mathematical modeling of cell dynamics and optimal therapy applied in chronic myeloid leukemia
12.30–13.00 **Aurora Marica:** Control and stabilization of waves on heterogeneous meshes

Section B (room 231) -----

Chairman: Erika Ábrahám

- 11.30–12.00 **Gheorghe Sebestyén, Anca Hangan:** Anomaly Detection Techniques in Cyber-Physical Systems
12.00–12.30 **András Béleczi, Bálint Molnár, Zoltán Vincellér, Attila Kiss:** Comparing SAP HANA's capabilities with other open-source platforms and solutions
12.30–13.00 **Zoltán Kátai, Katalin Tünde Jánosi-Rancz, Roland Bogosi:** Linking formal and informal structures based on faculty members' email communication patterns
13.00–14.30 Lunch break

September 7, 14.30–20.00

Plenary session (room 230)

Chairman: Gheorghe Sebestyén

14.30–15.20 **Piroska Haller:** Design and implementation of secure industrial network

15.30–16.20 **Dan Cristea:** The Time Yards Model: a Way to Decipher the Evolution of Characters over Time in Texts

16.20–16.45 Coffee break

Section A (room 230) -----

Chairman: Biagio Ricceri

16.45–17.15 **Mihai Mihăilescu:** Classification of isolated singularities for inhomogeneous operators in divergence form

17.15–17.35 **Francesca Faraci:** A characterization related to Schrödinger equations

17.45–18.15 **Denisa Stancu-Dumitru:** The asymptotic behavior of a class of ϕ -harmonic functions in Orlicz-Sobolev spaces

18.15–18.30 Coffee break

Chairman: Cristian Cazacu

18.30–19.00 **Emil Horobeț:** Orthogonally decomposable tensors

19.00–19.30 **Ábel Lőrinczi:** Tree representations using Schofield induction

19.30–20.00 **Grigore Ștefan Sălăgean:** Integral operators on certain classes of analytic functions

Section B (room 231) -----

Chairman: Piroska Haller

16.45–17.15 **Zoltán Kása, Pál Kupán:** Graph reconstruction from degree sequences

17.15–17.35 **Gyöngyvér Márton:** Re-encryption – perspectives in cryptography

17.45–18.15 **Balázs Vass:** On the Size and Computation Time of Maximal Regional Shared Risk Link Group Lists

18.15–18.30 Coffee break

Chairman: Lehel István Kovács

18.30–19.00 **Géza Vekov:** A Linear Structure to Implement Searching Algorithms

19.00–19.30 **Zsolt-Levente Kucsván:** Analysis of different limitations in Computer Vision

20.00 Dinner

September 8, 9.00–15.45

8.00–9.00 Breakfast

Plenary session (room 230)

Chairman: Alexandru Kristály

9.00–9.50 **Biagio Ricceri:** An overview of the applications of certain minimax theorems

10.00–10.50 **Gheorghe Moroşanu:** Eigenvalues of the negative (p,q) -Laplacian with different boundary conditions

10.50–11.30 Coffee break

Section A (room 230) -----

Chairman: Gheorghe Moroşanu

11.30–12.00 **Cristian Cazacu:** Schrödinger operators with singular potentials: some properties and applications

12.00–12.30 **Nicuşor Costea:** Partial differential inclusions involving Φ -Laplace operators

12.30–13.00 **Maria Fărcăşeanu:** On a family of torsional creep problems involving rapidly growing operators in divergence form

13.00–14.30 Lunch break

Plenary session (room 230)

Chairman: Francesca Faraci

14.30–15.20 **Alexandru Kristály:** Intrinsic geometric inequalities on sub-Riemannian structures

15.20–15.45 Coffee break

September 8, 15.45–20.30

Section A (room 230) -----

Chairman: Mihai Mihailescu

15.45–16.15 **Ioan Radu Peter, Csaba Varga:** Hardy Inequalities in Finsler manifolds

16.15–16.45 **Idikó Mezei:** Existence results for Finsler-Laplacian type equations

16.45–17.15 **Csaba Farkas:** Maxwell-Schrödinger systems on Riemannian manifolds

17.15–17.30 Coffee break

Chairman: Csaba Varga

17.30–18.00 **Júlia Salamon:** Correlated equilibrium of interval-valued matrix games

18.00–18.30 **Garda-Mátyás Edit:** Quadratic functions fulfilling an additional condition along hyperbolas or the unit circle

Section B (room 231) -----

Chairman: Gyöngyvér Márton

15.45–16.15 **Lehel István Kovács:** Kinect based gesture controlled Robotic arm using inverse kinematics

16.15–16.45 **Lehel Csató:** Deep learning, a new method or an old one revisited

16.45–17.15 **Andrea Éva Molnár, Viorica Varga, Christian Săcărea, Levente Maier:** Conceptual Graphs Based Modeling of
Semi-Structured Data

19.00–19.30 Transylvanian folk music and dance (Foyer)

20.30 Social Dinner (Hotel Sandoria)

September 9, 9.00–19.00

8.00–9.00 Breakfast

Section A (room 230) -----

Chairman: Fernando Adrián Fernández Tojo

9.00–9.30 **Róbert Szász:** On the Brannan conjecture

9.30–10.00 **Marcel Bogdan:** What is Laplace transform?

10.00–10.30 **Eszter Szatmári:** Coefficient bounds and Fekete-Szegő problem for some classes of analytic functions defined by using a fractional operator

10.30–10.45 Coffee break

Chairman: Róbert Szász

10.45–11.15 **Anca Grad:** Monotone inclusions through inertial algorithms

11.15–11.45 **Olga Engel, Hüseyin Irmak:** Some notes on certain applications of the Tremblay operator in the complex plane

12.15–13.45 Lunch break

13.30 City Tour

18.00 Dinner