

TOPICS IN MATHEMATICAL ANALYSIS AND GRAPH THEORY (MAGT 2006): REALIZED PROGRAM

Editorial note. In four days of scientific program of MAGT 2006, the total of 98 participants from 25 countries presented 20 invited and 67 contributed papers. Scientific activities were running in the building of Faculty of Mechanical Engineering, University of Belgrade, while the welcome cocktail, on-site registration and the opening were held in the building of the Faculty of Electrical Engineering. Abstract of presented talks can be found in [1]. The abstract book [2] was printed prior to the conference, and contains abstracts of all submitted and accepted talks. Twenty four peer-refereed full papers are published in this issue (pages 18–323).

Thursday, August 31

18:00 – 20:00 *Welcome cocktail and on-site registration*

Friday, September 1

8:00 – 9:30 On-site registration (continuation)

9:30 – 10:30 Opening and transfer to Mechanical Engineering

10:30 – 11:00 Coffee break

Room A: Mathematical Analysis (chair: HARI M. SRIVASTAVA)

11:00 – 11:45 THEMISTOCLES M. RASSIAS, Dep. of Math., Nation. Tech. Univ. of Athens, Greece: *On the Mazur-Ulam theorem and the Aleksandrov problem for isometric mappings*

11:45 – 12:30 A. M. FINK, Mathematics Department, Iowa State University, USA: *What really is Hadamard's inequality*

12:30 – 12:45 Coffee break

12:45 – 13:30 GRADIMIR V. MILOVANOVIĆ, Faculty of Electronic Engineering, University of Niš, Serbia: *Formal orthogonal polynomials with respect to a moment functional and applications*

Room B: Graph Theory (chair: DOMINGOS MOREIRA CARDOSO)

11:00 – 11:45 PETER ROWLINSON, Department of Computing Science and Mathematics, University of Stirling, Scotland: *Star complements and extremal graphs*

11:45 – 12:30 ZSOLT TUZA, Computer and Automation Research Institute, Hungarian Academy of Sciences, Hungary: *Colorings of hypergraphs with local conditions*

13:30 – 14:30 Lunch

Room A: Topics in Analysis (chair: KOSTADIN TRENČEVSKI)

14:30 – 14:50 G. S. SRIVASTAVA: *Spaces of entire functions of two complex variables*

14:50 – 15:10 KOSTADIN TRENČEVSKI: *On the conjecture concerning the complex manifolds with odd complex dimension*

15:10 – 15:30 MONICA MOULIN RIBEIRO MERKLE: *A free boundary problem between two parallel planes*

15:30 – 15:50 Coffee break

15:50 – 16:10 SLOBODANKA JANKOVIĆ: *The property of good decomposition for slowly varying functions*

Room B: Tournaments (chair: ZSOLT TUZA)

14:50 – 15:10 MASAYA TAKAHASHI, TAKAHIRO WATANABE, TAKESHI YOSHIMURA: *A consideration of the score sequence pair problems of (r_{11}, r_{12}, r_{22}) -tournaments*

15:10 – 15:30 JEA-HYUN PARK, SOON-YEONG CHUNG: *The chip-firing game and the Dirichlet game on weighted graphs*

15:30 – 15:50 HIROAKI MOHRI: *Fixed charged network flow problem and its cooperative game*

15:50 – 16:10 LJILJANA BRANKOVIĆ, YUQING LIN; *Graceful labeling of trees with maximum degree 3*

Room C: Topics in Analysis (chair: ZAGORKA LOZANOV-CRVENKOVIĆ)

14:30 – 14:50 DENNIS NEMZER: *Poisson's summation formula for boehmians*

16:40 – 17:00 DUŠANKA PERIŠIĆ, ZAGORKA LOZANOV-CRVENKOVIĆ: *Hermite expansion of ultradistribution*

16:10 – 16:40 Coffee break

Room A: Topics in Analysis (chair: PIETRO CERONE)

16:40 – 17:00 MILAN JOVANOVIĆ, DJURA PAUNIĆ: *Convex functions - some historical notes*

17:00 – 17:20 DRAGAN DODER: *On the set of inequalities*

17:20 – 17:40 BRANKO MALEŠEVIĆ, RATKO OBRADOVIĆ: *A method of proving a class of inequalities via Pade approximations*

17:40 – 18:00 ĆEMAL DOLIČANIN, MILISAV STEFANOVIĆ, SEAD REŠIĆ: *On pseudoscalar product of unisotropic vectors*

Room B: Topics in Graph Theory (chair: CARLOS M. DA FONSECA)

16:40 – 17:00 VADIM E. LEVIT, EUGEN MANDRESCU: *Partial unimodality for independence polynomials of some compound graphs*

17:00 – 17:20 MEHDI ALAEIYAN, MOHSEN GHASEMI: *Normal Cayley digraphs with valency 2 on groups*

17:20 – 17:40 JOEL RATSABY: *Density of smooth boolean function*

Room C: Topics in Analysis (chair: ZAGORKA LOZANOV-CRVENKOVIĆ)

16:40 – 17:00 DUŠANKA PERIŠIĆ, ZAGORKA LOZANOV-CRVENKOVIĆ: *Hermite expansion of ultradistribution*

19:00 *Reception in the City Hall*

Saturday, September 2Room A: Mathematical Analysis (chair: GRADIMIR V. MILOVANOVIĆ)

9:00 – 9:45 INGRAM OLKIN, School of Education, Stanford University, USA: *Inequalities: some probabilistic, some matrix, and some both*

9:45 – 10:30 HARI M. SRIVASTAVA, Department of Mathematics and Statistics, University of Victoria, Canada: *Some Fox-Wright generalized hypergeometric functions and associated families of convolution operators*

Room B: Graph Theory (chair: SLOBODAN K. SIMIĆ)

9:00 – 9:45 DOMINGOS MOREIRA CARDOSO, Universidade de Aveiro, Departamento de Matematica, Aveiro - Portugal: *The class of graphs with convex-qp stability number*

9:45 – 10:30 TOMAŽ PISANSKI, IMFM, University of Ljubljana and University of Primorska, Slovenia: *Morse matchings of colored graphs*

10:30 – 11:00 Coffee break

Room A: Mathematical Analysis (chair: THEMISTOCLES M. RASSIAS)

11:00 – 11:45 PIETRO CERONE, School of Computer Science and Mathematics, Faculty of Health, Engineering and Science, Victoria, Australia: *Special Functions: Their approximation and bounds*

11:45 – 12:30 SEVER DRAGOMIR, Faculty of Engineering and Sciences, Victoria University of Technology, Australia: *New inequalities of the Kantorovich type for bounded linear operators in Hilbert spaces*

Room B: Graph Theory (chair: SLOBODAN K. SIMIĆ)

11:00 – 11:45 DRAGOŠ CVETKOVIĆ, Faculty of Electrical Engineering, University of Belgrade, Serbia: *Some properties of signless Laplacian eigenvalues of graphs*

12:30 – 14:30 Lunch

Room A: Fixed point theory (chair: LJILJANA GAJIĆ)

14:30 – 14:50 SINIŠA JEŠIĆ, MILAN TASKOVIĆ, NATAŠA BABAČEV: *Transversal spaces and fixed point theorems*

14:50 – 15:10 LJILJANA GAJIĆ: *On fixed point in D-metric spaces*

15:10 – 15:30 IVAN D. ARANDJELOVIĆ: *Note on asymptotic contractions*

15:30 – 15:50 SINIŠA JEŠIĆ, RALE NIKOLIĆ: *Common fixed point theorems for R-weakly commuting mappings defined on fuzzy metric spaces*

Room B: Spectra of Graphs (chair: KRISTINA VUŠKOVIĆ)

14:30 – 14:50 FRANCESCO BELARDO, ENZO MARIA LI MARZI, SLOBODAN K. SIMIĆ: *Ordering graphs with the index in the interval $(2, \sqrt{2 + \sqrt{5}})$*

14:50 – 15:10 FRANCIS K. BELL, DRAGOŠ CVETKOVIĆ, PETER ROWLINSON, SLOBODAN K. SIMIĆ: *Graphs for which the least eigenvalue is minimal*

15:10 – 15:30 MIRKO LEPOVIĆ: *Some results on conjugate integral graphs*

15:30 – 15:50 CARLOS M. DA FONSECA: *Location of eigenvalues of acyclic matrices*

15:50 – 16:10 MIROSLAV PETROVIĆ, BOJANA BOROVIĆANIN: *On the graphs with maximal index*

Room C: Special Functions and Numerical Analysis (chair: LJILJANA PETKOVIĆ)

14:30 – 14:50 NENAD ČAKIĆ: *An unified explicit formula for Stirling numbers*

14:50 – 15:10 TIBOR K. POGANY, ŽIVORAD TOMOVSKI: *On Mathieu-type series which terms contain generalized hypergeometric function ${}_qF_p$ and Meijer's G-function*

15:10 – 15:30 PURSHOTTAM NARAIN AGRAWAL, ASHA RAM GAIROLA: *On Miccelli combination of modified Bernstein polynomials*

15:30 – 15:50 ALEKSANDRA ERIĆ: *Polynomial interpolation problem for skew polynomials*

15:50 – 16:10 LJILJANA D. PETKOVIĆ, MIODRAG S. PETKOVIĆ; *On the Newton-like method for the inclusion of polynomial zeros*

16:10 – 16:40 Coffee break

Room A: Topics in Analysis (chair: LJILJANA GAJIĆ)

17:00 – 17:20 PRATULANANDA DAS, B. K. LAHIRI: *I and I^* - convergence in topological spaces*

Room B: Topics in Graph Theory (chair: TOMAŽ PISANSKI)

16:40 – 17:00 ZORAN RADOSAVLJEVIĆ: *On unicyclic reflexive graphs*

17:00 – 17:20 MARIJA RAŠAJSKI: *On a class of maximal reflexive θ graphs generated by Smith graphs*

17:20 – 17:40 KRISTINA VUŠKOVIĆ, F. MAFFRAY, N. TROTIGNON; *A combinatorial algorithm for maximum weighted clique for a subclass of perfect graphs*

17:40 – 18:00 SILVANA PETRUŠEVA; *Solving a shortest path problem in an environment which has Eulerian graph representation with a fractal structure, with an emotional agent*

18:00 – 18:20 DEJAN TOŠIĆ, SLOBODAN K. SIMIĆ, MILKA POTREBIĆ: *Analysis of electric circuits with MATHEMATICA*

Room C: Numerical Analysis (chair: NENAD CAKIĆ)

16:40 – 17:00 GERMAIN E. RANDRIAMBELOSOA: *Approximate solution of beam differential equation*

20:00 *Conference concert in Galerija fresaka (museum of frescoes): Pavle Aksentijević and the group Zapis; fashion show by Verica Planić*

Sunday, September 3

Room A: Mathematical Analysis (chair: MILAN MERKLE)

9:00 – 9:45 SOON-YEONG CHUNG, Department of Mathematics, Sogang University, Korea: *Inverse conductivity problems in the electrical networks*

9:45 – 10:30 STEVAN PILIPOVIĆ, Faculty of Sciences and Mathematics, University of Novi Sad, Serbia: *Algebra of generalized functions, generalized hyperfunctions and algebra of megafunctions*

Room B: Graph theory (chair: PETER ROWLINSON)

9:45 – 10:30 NATAŠA PRŽULJ, Department of Computer Science, University of California, Irvine, USA: *Protein-Protein interaction networks: Issues, models, and comparisons*

10:30 – 11:00 Coffee break

Room B: Graph Theory (chair: MILAN MERKLE)

11:00 – 11:15 ZORAN OBRADOVIĆ, Information Science and Technology Center, Temple University, USA: *Using gene ontology graphs for biomarker selection from integrated microarray, proteomics and clinical data* (joint work with Hong-box Hie and Slobodan Vučetić)

Room B: Publications - Past and Present (chair: MILAN MERKLE)

11:15 – 13:00 Speakers:

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|----------------------|---------------------------|
| - DRAGOŠ CVETKOVIĆ | - THEMISTOCLES M. RASSIAS |
| - SLAVIŠA PREŠIĆ | - PETER ROWLINSON |
| - DOBRILLO TOŠIĆ | - DRAGOŠ CVETKOVIĆ |
| - HARI M. SRIVASTAVA | - ZSOLT TUZA |
| - A. M. FINK | - SEVER DRAGOMIR |
| - INGRAM OLKIN | - SLOBODAN K. SIMIĆ |
| - LEV M. BERKOVICH | |

15:00 – 17:00 *Walking tour: sightseeing Belgrade*

20:00 *Conference dinner, restaurant Ima dana*

Monday, September 4

Room A: Mathematical Analysis (chair: GRADIMIR V. MILOVANOVIĆ)

9:00 – 9:45 ALEKSANDAR IVIĆ, Faculty of Mining and Geology, University of Belgrade, Serbia: *The Rankin - Selberg problem*

9:45 – 10:30 WAYNE HAYES, School of Information and Computer Science, Uni. of California, USA: *Outer solar system on the edge of chaos*

Room B: Mathematical Analysis (chair: MILAN MERKLE)

9:00 – 9:45 LEV M. BERKOVICH, Samara State University, Russia: *Method of a factorization of ordinary differential operators and its applications*

9:45 – 10:30 PETER G. L. LEACH, University of KwaZulu-Natal, Durban, South Africa: *Nonlocal symmetries: past, present and future*

10:30 – 11:00 Coffee break

Room A: Ordinary differential equations (chair: LEV M. BERKOVICH)

11:00 – 11:20 DRAGAN DIMITROVSKI, VLADIMIR RAJOVIĆ, ALEKSANDAR DIMITROVSKI (In memory of Professor Mitrović): *On the need for and importance of a thematic monograph exclusively on periodical solutions of differential equations*

11:20 – 11:40 DRAGAN DIMITROVSKI, VLADIMIR RAJOVIĆ, ALEKSANDAR DIMITROVSKI: *Global aspect of non-homogenous differential equation of the second order*

11:40 – 12:00 MILOJE RAJOVIĆ, RADE STOJILJKOVIĆ: *On types, form and supremum of solutions of ordinary homogenous linear differential equations of the second order*

12:00 – 12:20 BORO M. PIPEREVSKI: *On a correlation between the nature of a solution of a class of differential equation of n -th order and the solutions of its adequate characteristic algebraic equation of n -th degree*

12:20 – 12:40 STANA CVEJIĆ, MILENA LEKIĆ: *Sturm's theorems through iterations*

Room B: Computer Science (chair: TATJANA LUTOVAC)

11:00 – 11:20 ŽARKO MIJAJLOVIĆ, MILOŠ MILOŠEVIĆ, ALEKSANDAR PEROVIĆ: *Some properties of posynomial rings*

11:20 – 11:40 MILICA ANDJELIĆ: *On the matrix equation $XA - AX = \tau(X)$*

11:40 – 12:00 DEJAN ŽIVKOVIĆ: *Non-polynomial lower bound for monotone depth-3 circuits computing an NC^1 -complete function*

12:00 – 12:20 NENAD KRĐŽAVAC: *Implementation tableau algorithm for a description logic using a model transformation*

12:20 – 12:40 MIODRAG RAŠKOVIĆ, ZORAN MARKOVIĆ, ZORAN OGNJANOVIĆ: *A logic with imprecise conditional probabilities*

12:40 – 14:30 Lunch

Room A: Differential equations (chair: SOON-YEONG CHUNG)

14:50 – 15:10 BILJANA JOLEVSKA-TUNESKA: *On a differential equation with non-standard coefficients*

15:10 – 15:30 JONG-HO KIM, SOON-YEONG CHUNG: *(p, w) -harmonic functions and inverse problems on nonlinear network*

15:30 – 15:50 YUN-SUNG CHUNG, SOON-YEONG CHUNG: *Boundary value problems for diffusion and elastic operators on networks*

15:50 – 16:10 DIANA DOLIĆANIN, VALERY G. ROMANOVSKI, TATJANA MIRKOVIĆ: *Linearizability conditions of a polynomial system of degree five*

Room B: Stochastic (chair: SLOBODANKA JANKOVIĆ)

14:30 – 14:50 TAKASHI MATSUHISA: *Bayesian communication leading to Nash equilibrium*

14:50 – 15:10 TZUU-SHUH CHIANG, YUNSHYONG CHOW: *Optimal Ventcel graphs, minimal cost spanning trees and asymptotic probabilities*

15:10 – 15:30 DJORDJE V. VUKOMANOVIĆ: *Probability on a universe of discourse*

15:30 – 15:50 MIROSLAV M. RISTIĆ, BILJANA C. POPOVIĆ, ALEKSANDAR NASTIĆ, MIODRAG DJORDJEVIĆ: *A bivariate Marshall and Olkin exponential minification process*

15:50 – 16:10 SLOBODANKA S. MITROVIĆ: *Stochastic modeling of the growth process*

Room C: Various Topics (chair: MONICA MOULIN RIBEIRO MERKLE)

14:30 – 14:50 MAXIMILIANO PINTO DAMAS, LILIAN MARKENZON, NAIR MARIA MAIA DE ABREU: *The concept of tuner set for graphs*

14:50 – 15:10 NEBOJŠA NIKOLIĆ, RADE LAZOVIĆ: *The size of some antichains for multisets*

15:10 – 15:30 MIRJANA STOJANOVIĆ, R. GORENFLO: *Diffusion-wave problem*

15:30 – 15:50 TATJANA LUTOVAC, JAMES HARLAND: *An algebraic approach to redundancy analysis of sequent proofs*

15:50 – 16:10 NIKOLA TUNESKI: *Starlikeness and convexity of a class of analytic functions*

16:10 – 16:40 Coffee break

Room A: Differential equations (chair: SOON-YEONG CHUNG)

16:40 – 17:00 YOUNG-SU LEE, SOON-YEONG CHUNG: *Stability for cubic functional equation in the spaces of generalized functions*

17:00 – 17:20 A. CARMONA, E. BENDITO, A. M. ENCINAS, J. M. GESTO: *Potential theory for BVP's in finite networks*

Room C: Various Topics (chair: MONICA MOULIN RIBEIRO MERKLE)

16:40 – 17:00 OLIVERA DJORDJEVIĆ: *On a Littlewood-Paley type inequality*

17:00 – 17:20 MIOMIR STANKOVIĆ, PREDRAG M. RAJKOVIĆ, SLADJANA D. MARINKOVIĆ *On the fractional integrals and derivatives in quantum calculus*

17:20 – 17:40 VLADIMIR BALTIĆ *On the number of certain types of restricted permutations*

17:40 *Closing ceremony*

Tuesday, September 5

Excursion to Sremski Karlovci and surroundings

REFERENCES

1. *Abstracts of talks presented at The International Mathematical Conference: Topics in Mathematical Analysis and Graph Theory*. Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat., **18** (2007), 94–138.
2. Program and Abstracts Book of The International Mathematical Conference: *Topics in Mathematical Analysis and Graph Theory*. Faculty of Electrical Engineering, University of Belgrade, 2006.