

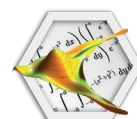
APPROXIMATION AND COMPUTATION THEORY AND APPLICATIONS (ACTA 2017)

Dedicated to Professor Walter Gautschi on the Occasion of his 90th Anniversary

АПРОКСИМАЦИЈЕ И ИЗРАЧУНАВАЊА ТЕОРИЈА И ПРИМЕНЕ

Поводом деведесетог рођендана професора Волтера Гаучија

SERBIAN ACADEMY OF SCIENCES AND ARTS,
Belgrade, Knez Mihailova 35,
November 30 – December 2, 2017
СРПСКА АКАДЕМИЈА НАУКА И УМЕТНОСТИ,
Кнез Михаилова 35, Београд
30. новембар – 2. децембар 2017. године



ACTA 2017

ACTA 2017 Conference program

1st day – Thursday, November 30th

09:00-10:00	Registration
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
10:00-10:30	Opening Ceremony
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
10:30-11:30	Session A
CHAIRS	Gradimir V. Milovanović, Lothar Reichel and Miodrag Spalević
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
10:30-11:00	Gradimir V. Milovanović (Serbian Academy of Sciences and Arts, Serbia) <i>WALTER GAUTSCHI – A Master in Approximation and Computation</i>
11:00-11:30	Walter Gautschi (Purdue University, United States) <i>Progress by Accident: Some Reflections on my Career</i>
11:30-12:00	Coffee Break
12:00-12:30	Session B
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
12:00-12:30	Miodrag Spalević (Faculty of mechanical engineering, University of Belgrade, Serbia) <i>Walter Gautschi and Serbian School of Numerical Integration</i>
12:30-13:15	Session C
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
12:30-13:15	Walter Van Assche (Katholieke Universiteit Leuven, Belgium) <i>Multiple Hermite polynomials and simultaneous quadrature</i>
13:30-15:00	Lunch
15:00-16:30	Session D
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
15:00-15:45	Martin Gander (University of Geneva, Switzerland) <i>Five Decades of Time Parallel Time Integration: Best Current Methods for Parabolic and Hyperbolic Problems</i>
15:45-16:30	Francisco Marcellán (Universidad Carlos III de Madrid, Spain) <i>Orthogonal polynomials, Geronimus transformations and quadrature rules</i>
16:30-17:00	Coffee Break
17:00-18:30	Session E
LOCATION	Main hall 2nd floor (Serbian Academy of Sciences and Arts)
17:00-17:45	Sotirios Notaris (National and Kapodistrian University of Athens, Greece) <i>Gauss–Kronrod quadrature: Recent advances and open questions</i>
17:45-18:30	Lothar Reichel (Kent State University, United States) <i>Generalized Anti–Gauss–Type Quadrature Rules</i>

2nd day – Friday, December 1st

09:00–11:00	Session A1
CHAIR	Lothar Reichel
LOCATION	211 (Faculty of Mechanical Engineering)
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09:00–09:30	Donatella Occorsio (University of Basilicata, Italy) <i>A product integration rule for hypersingular integrals on the positive semi-axis</i>
09:30–10:00	Miroslav Pranić (University of Banja Luka, Bosnia and Herzegovina) <i>Gauss quadrature and incurable breakdown in the Lanczos algorithm</i>
10:00–10:30	Giuseppe Mastroianni (University of Basilicata, Italy) <i>Polynomial approximation of functions with exponential monotonicity</i>
10:30–11:00	Incoronata Notarangelo (University of Basilicata, Italy) <i>A Nyström method for Fredholm integral equations with exponential weights on $(0, +\infty)$</i>
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11:00–11:30	Coffee Break
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11:30–13:30	Session A2
CHAIR	Sotirios Notaris
LOCATION	211 (Faculty of Mechanical Engineering)
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11:30–12:00	Walter Gautschi (Purdue University, United States) <i>Polynomials orthogonal with respect to the Binet and related weight functions</i>
12:00–12:30	Yilmaz Simsek (Akdeniz University, Turkey) <i>Generating functions for some special polynomials including Poisson–Charlier, Hermite type, Milne–Thomson type and the other polynomials</i>
12:30–13:00	Maria Carmela De Bonis (University of Basilicata, Italy) <i>On a quadrature method for Prandtl’s integro–differential equations in weighted Zygmund spaces with uniform norm</i>
13:00–13:30	Concetta Laurita (University of Basilicata, Italy) <i>On the stability of a modified Nyström method for Mellin convolution equations</i>
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13:30–15:00	Lunch Break
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15:00–16:30	Session A3
CHAIR	Francisco Marcellán
LOCATION	211 (Faculty of Mechanical Engineering)
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15:00–15:30	Ramón Orive (Universidad de La Laguna, Spain) <i>Minimax Approximation and Probability. Estimating the parameter of a biased coin</i>
15:30–16:00	Dora Seleši (Faculty of Sciences, University of Novi Sad, Serbia) <i>Approximation of generalized stochastic processes</i>
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16:00–16:30	Zoran Vidović (Teacher Education Faculty, University of Belgrade, Serbia) <i>Bayesian prediction of order statistics based on record values from generalized exponential distribution</i>
15:00–16:30	Session B3
CHAIR	Katica R. (Stevanović) Hedrih
LOCATION	513 (Faculty of Mechanical Engineering)
15:00–15:30	Branko Drljača (University of Kosovska Mitrovica, Serbia) <i>Unconditionally positive finite difference and standard finite difference schemes for advection diffusion reaction equations</i>
15:30–16:00	Branko Drljača (University of Kosovska Mitrovica, Serbia) <i>Numerical solution of one-dimensional advection–diffusion equation with constant and periodic boundary conditions</i>
16:00–16:30	Dragan Pavlović (Faculty of Electrical Engineering, University of Belgrade, Serbia) <i>Calculation of the channel discharge function for the generalized lightning traveling current source return stroke model</i>
17:00–17:30	Coffee Break
17:00–19:00	Session A4
CHAIR	Donatella Occorsio
LOCATION	211 (Faculty of Mechanical Engineering)
17:00–17:30	Agnieszka Prusińska (Faculty of Science, Siedlce University, Poland) <i>P-regular nonlinear optimization – calculus and methods</i>
17:30–18:00	Predrag Stanimirović (Faculty of Sciences and Mathematics, University of Niš, Serbia) <i>RNN solution of linear matrix equation and its applications</i>
18:00–18:30	Tuğba Bostancı (Ankara University, Turkey) <i>An Extension of Stancu Operator</i>
18:30–19:00	Snežana S. Djordjević (Faculty of Technology Leskovac, University of Nis, Serbia) <i>Analysis of a class of conjugate gradient methods</i>
17:00–19:00	Session B4
CHAIR	Bilge Peker
LOCATION	513 (Faculty of Mechanical Engineering)
17:00–17:30	Zorica Milovanović Jeknić (Faculty of Construction Management, Serbia) <i>Parabolic–Hyperbolic Transmission Problem in Disjoint Domains</i>
17:30–18:00	Bratislav Sredojević (Faculty of Science, University of Kragujevac, Serbia) <i>Finite difference method for the 2D heat equation with concentrated capacity</i>
18:00–18:30	Katica R. (Stevanović) Hedrih (Mathematical institute SANU, Serbia) <i>Approximations in an investigation of the vibro–impact dynamics of rolling bodies in successive central collisions on curvilinear trace</i>

18:30–19:00 Haldun Alpaslan Peker (Selcuk University, Turkey)
A Semi-Analytical Approach to Solve a Flow Model

3rd day – Saturday, Decembar 2nd

09:00–11:00	Session AA1
CHAIR	Miroslav Pranić
LOCATION	211 (Faculty of Mechanical Engineering)
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09:00–10:30	Aleksandar Jovanović (Faculty of Science, University of Kragujevac, Serbia) <i>Construction of the optimal set of quadrature rules in the sense of Borges</i>
09:30–10:00	Dušan Djukić (Faculty of Mechanical Engineering, University of Belgrade, Serbia) <i>Internality of truncated generalized averaged Gaussian quadratures</i>
10:00–10:30	Jelena Tomanović (Faculty of mechanical engineering, University of Belgrade, Serbia) <i>Error Estimates for Certain Cubature Formulae</i>
10:30–11:00	Rada Mutavdžić (Faculty of Mechanical Engineering, University of Belgrade, Serbia) <i>Error bounds for Kronrod extension of generalizations of Michelli-Rivlin quadrature formula for analytic functions</i>
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09:00–11:00	Session BB1
CHAIR	Haldun Alpaslan Peker
LOCATION	513 (Faculty of Mechanical Engineering)
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09:00–09:30	Bilge Peker (Necmettin Erbakan University, Turkey) <i>On the Use of Continued Fractions to Solve Binary Quadratic Diophantine Equations</i>
09:30–10:00	Nenad Cakić (Faculty of Electrical Engineering, University of Belgrade, Serbia) <i>On generalized Whitney numbers</i>
10:00–10:30	Rabia Aktas (Ankara University, Turkey) <i>Miscellaneous Properties for a Class of Analytic Functions Defined by Rodrigues Type Formula</i>
10:30–11:00	Irem Kucukoglu (Antalya Akev University, Turkey) <i>Numerical evaluations on power series including the numbers of Lyndon words and interpolation functions for the Apostol-type polynomials</i>
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11:00–11:30	Coffee Break
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11:30–13:30	Session AA2
CHAIR	Maria Carmela De Bonis
LOCATION	211 (Faculty of Mechanical Engineering)
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11:30–12:00	Miodrag Mateljević (Faculty of Mathematics, University of Belgrade, Serbia)

Interior estimate for elliptic PDE and distortion of quasiconformal harmonic mappings

- 12:00–12:30 Zoran Ovcin
(Faculty of Technical Sciences, University of Novi Sad, Serbia)
Stochastic Approximation Method with Second Order Search Directions
- 12:30–13:00 Ljubica Mihić
(Information Technology School, Belgrade, Serbia)
Error estimations of Turan formulas with Gori–Micchelli and generalized Chebyshev weight functions
- 13:00–13:30 Mahmoud Behroozifar
(Babol Noshirvani university of technology, Iran)
Pseudospectral method for time-fractional differential equation with boundary conditions

11:30–13:30 Session BB2
CHAIR Dejan Bojović
LOCATION **513 (Faculty of Mechanical Engineering)**

- 11:30–12:00 Milan Dotlić (Jaroslav Cerni Institute, Serbia)
Non-linear multi-point flux approximation in the near-well region
- 12:00–12:30 Bojan Banjac
(Faculty of Technical Sciences, University of Novi Sad, Serbia)
One method for proving some classes of analytical inequalities
- 12:30–13:00 Ljubica Vujović (University of Belgrade, Serbia)
Application of machine learning algorithms to high frequency trading
- 13:00–13:30 Zoran Pucanović (Faculty of Civil Engineering, Belgrade, Serbia)
Note on right zero divisors in the ring of infinite upper triangular matrices over a field

13:30–15:00 Lunch

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