

Union of Mathematicians of Macedonia
VI Congress of Mathematicians of Macedonia

PROGRAM

June 15-18, 2016, Ohrid, Republic of Macedonia

WEDNESDAY, JUNE 15, 2016

- 11:00 – 14:30 REGISTRATION, Hotel Metropol
- 13:30 – 15:00 Lunch
- 15:30 – 16:20 OPENING CEREMONY, Hotel Metropol

PLENARY LECTURES

Chair: Donco Dimovski

Room 1

16:30 – 17:15	Stevan Pilipović: G-type spaces of ultradistributions over \mathbb{R}_+^d
17:15 – 18:00	Luigi Rodino: Some remarks on the recent history of the partial differential equations

- 18:00 – 18:20 Coffee break

Section 1: Algebra, Discrete Mathematics, Combinatorics and Number Theory

Chair: Valentina Miovaska

Room 1

18:20 – 18:40	Risto Atanasov: Groups and loops partitioned by subgroups
18:40 – 19:00	Arben Baushi: Characteristic of tiling generated by a root of polynomial $P(x) = x^4 - 3x^3 + x^2 - 2x - 1$
19:00 – 19:20	Aleksandar Bikov, Nedyalko Nenov: The edge Folkman number $F_c(3, 3; 4)$ is greater than 19

Section 2: Complex Analysis, Real Analysis and Functional Analysis

Chair: Nikola Tuneski

Room 2

18:20 – 18:40	Ekrem (Aljimi) Alimi, Elida Hoxha, Florim Hyseni, Xhvet Thaqi: Approximation for periodic functions via weighted A-statistical convergence for sequences of positive linear operators
18:40 – 19:00	Anila Duka, Ndrçim Sadikaj: On quasiconformal selfmappings of the unit disk and the unit ball
19:00 – 19:20	Teodor Bylboacă: On the theory of differential subordination and superordination

Section 3: Differential Equations and Dynamical Systems

Chair: Burcu Silindir Yantir

Room 3

18:20 – 18:40	Slagjana Brsakoska: About the zeros and the oscillatory character of the solution of one areolar equation of second order
18:40 – 19:00	Lazo Dimov: On the types of linear differential equations of second order and their solutions
19:00 – 19:20	Diana Dolićanin-Đekić: Strongly isochronous centers of two-dimensional cubic systems with degenerate infinity

Section 7: Mathematical Aspects of Computer Sciences

Chair: Gjorgji Markoski

Room 4

18:20 – 18:40	Anastasios Papapostolu, Dimitar Birov: A pi-calculus ADL for semi-automatic code generation
18:40 – 19:00	Artan Berisha, Faton Berisha: Modified AES for increasing data security and its parallel implementation
19:00 – 19:20	Mimoza Petrova, Vanco Cabukovski, Roman Golubovski: Supporting Education in Math Sciences with a Low-budget LMS SAKAI
19:20 – 19:40	Igor Janevski, Roman Golubovski, Vanco Cabukovski: Mathematical calibration of sensors for embedded applications

INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Stevan Pilipovic

Room 5

18:15 – 18:55	Sandro Coriasco: A sharp Weyl formula for tensor products of pseudodifferential operators
18:55 – 19:35	Marco Capiello: Pseudodifferential operators and wave front sets on quasi-analytic Gelfand-Shilov spaces
19:35 – 20:00	Bojan Prangoski: Complex powers of infinite order pseudodifferential operators

20:00 – 21:00 Dinner

21:00 – COCKTAIL, Hotel Metropol

THURSDAY, JUNE 16, 2016

PLENARY LECTURES

Chair: Smile Markovski

Room 1

09:00 – 09:45	Donco Dimovski: Codimension one coincidence indices
09:45 – 10:30	Nikita Shekutkovski: On the concept of connectedness

10:30 – 10:50 Coffee break

Section 1: Algebra, Discrete Mathematics, Combinatorics and Number Theory

Chair: Risto Atanasov

Room 1

10:50 – 11:10	Valentina Miovska, Vesna Celakoska-Jordanova: Vector valued hyperstructures
11:10 – 11:30	İbrahim Şentürk, Tahsin Öner: Categorical syllogisms on Heyting algebras
11:30 – 11:50	Lidija Goracinova-Ilieva, Emilija Spasova-Kamcheva: An algebraic representation of a class of homogeneous Steiner quadruple systems

Section 2: Complex Analysis, Real Analysis and Functional Analysis

Chair: Dilek Söymelez

Room 2

10:50 – 11:10	Stela Čeno, Gladiola Tigno: Asymmetric inner product and asymmetric quasi norm function
11:10 – 11:30	Katerina Anevaska, Risto Malcheski: Remark about characterization of 2-inner product
11:30 – 11:50	Paul Gauthier: Approximation by: Riemann zeta-function; polynomials (rational functions) with constrained zeros (poles)
11:50 – 12:10	Martin Lukareski, Samoil Malcheski: Sequentially convergent mappings and common fixed points of mappings in 2-Banach space

Section 3: Differential Equations and Dynamical Systems

Chair: Slagjana Brsakoska

Room 3

10:50 – 11:10	Billur Kaymakçalan: Second order dynamic operator with transmission conditions and associated contractive operator
11:10 – 11:30	Seda Kizilbudak, Çalışkan, Serpil Uslu: Spectral properties of eigenvalues and eigenfunctions of a discontinuous boundary value problem with retarded argument
11:30 – 11:50	Ekaterina Madamlieva, Loreta Kasmiska, Snezhana Hristova: Approximate method for the initial value problem for impulsive difference equations
11:50 – 12:10	Gjorgji Markoski, Monika Peshevska, Aleksandar Gjurchinovski: Extended discrete transformation method for nonlinear systems of ordinary and fractional differential equations

Section 8: History of Mathematics and Mathematics Education

Chair: Irena Stojkovska

Room 6

10:50 – 11:10	Valentina Miovska, Aneta Gacovska-Barandovska: Most frequent errors and misconceptions of first year math students in high school problems
11:10 – 11:30	Gordana Nikolovska, Irena Stojkovska: Algebraic strategies for predictions in elementary mathematics education
11:30 – 11:50	Branislav Popović: Infinity in mathematics teaching in primary school
11:50 – 12:10	Marijana Toševska, Math teachers' past and current experience affecting their future test grading

Workshop FIXED POINT THEORY AND ITS APPLICATIONS

Chair: Erdal Karapinar

Room 4

10:50 – 11:10	Kenan Taş
11:10 – 11:30	İnci Erhan: Quasi-dislocated spaces
11:30 – 11:50	Mahpeyker Öztürk: Modular spaces and some fixed point theorem
11:50 – 12:10	Ümit Aksoy: Applications of fixed point theory results to ordinary and partial differential equations

INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Bojan Prangoski

Room 5

10:50 – 11:30	Joachim Toft: Small test function and large distribution spaces, invariant under Fourier transformation
11:30 – 12:10	Ville Turunen: Theory and applications of time-frequency analysis

12:10 – 12:30 Coffee break

Section 4: Topology, Geometry, Differential Geometry and Mathematical Physics

Chair: Ivko Dimitric

Room 1

12:30 – 12:50	Ferihe Atalan, Elif Medetoğullari: Birman–Hilden property and Non-orientable surfaces
12:50 – 13:10	Şerife Nur Bozdağ, Ali Çalışkan: Analysis of curves with Lie groups
13:10 – 13:30	Sonja Čalamani, Dončo Dimovski, Mazanna Sevverin-Kuzmanovska: Theorems of metrizations in $(3, j, \rho)$ - B -metrizable spaces, $j \in \{1, 2\}$

Section 2: Complex Analysis, Real Analysis and Functional Analysis

Chair: Martin Lukareski

Room 2

12:30 – 12:50	Aleksa Malcheski, Alit Ibraimi, Risto Malcheski: Extending Kannan and Chatterjea theorems in 2-Banach spaces by using sequentially convergent mappings
12:50 – 13:10	Milutin Obradović: Recent results on a class of univalent functions
13:10 – 13:30	Ledia Subashi: Properties of a tiling generated by the golden ratio

Section 3: Differential Equations and Dynamical Systems

Chair: Boro Piperevski

Room 3

12:30 – 12:50	Maya Mincheva: Multistationarity in reaction networks models
12:50 – 13:10	Zerin Özçubukcu, Oya Ünal: On the regularized trace formula of the second order differential operator equation with semi-periodic boundary conditions
13:10 – 13:30	Ahmet Yantir: On continuous dependence of solutions of dynamic equations

Section 8: History of Mathematics and Mathematics Education

Chair: Veselin Nenkov

Room 6

12:30 – 12:50	Boce Mitrevski, Aneta Gacovska-Barandovska, Lambe Barandovski: Application of math knowledge in solving problems of geometrical optics
12:50 – 13:10	Mejdin Saliji, Aneta Velkoska, Dončo Dimovski: Analysis of tasks and tests in mathematics for eighth grade in nine-years primary school
13:10 – 13:30	Biljana Shuminoska, Irena Stojkovska: Mathematical modeling in mathematics education through solving realistic Fermi problems
13:30–13:50	Zoran Trifunov, Marice Lazarovska: Solving real-life problems for increasing the motivation of students in learning Mathematics

Workshop FIXED POINT THEORY AND ITS APPLICATIONS

Chair: Erdal Karapinar

Room 4

12:30 – 12:50	İshak Altun: Some fixed point results on quasi metric spaces
12:50 – 13:10	Gonca Durmaz: Some relations between recent fixed point results on metric space
13:10 – 13:30	Hacer Dağ: A fixed point theorem for multivalued mappings on quasi metric space

INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Jasson Vindas

Room 5

12:25 – 12:50	Pavel Dimovski: Modulation spaces related to translation-invariant Banach spaces of quasi-analytic ultradistributions
12:50 – 13:15	Daniel Velinov: C-distribution semigroups and C-ultradistribution semigroups in locally convex spaces
13:15 – 13:40	Djordje Vuckovic: Eigenexpansions of ultradifferentiable functions and ultradistributions in \mathbb{R}^n

13:30 – 15:30 Lunch

PLENARY LECTURE

Chair: Nikita Shekutkovski

Room 1

15:30 – 16:15	Smile Markovski: Applications of Quasigroup String Transformations - Results of 20 Years of Investigation of Macedonian Researchers
16:15 – 17:00	Veselin Nenkov: Invariant Theorems in the Euclidean Geometry with Respect to Conics

17:00 – 17:20 Coffee break

Section 4: Topology, Geometry, Differential Geometry and Mathematical Physics

Chair: Kostadin Trenčevski

Room 1

17:20 – 17:40	Ivko Dimitric: Hypersurfaces of quaternionic projective space of Chen type 2
17:40 – 18:00	Tunahan Turhan, Vildan Özdemir, Nihat Ayyildiz: On matrices and vector field in Minkowski 3-space
18:00 – 18:20	Gjorgji Markoski, Abdulla Buklla: On product of quasicomponents
18:20–18:40	Zoran Misajleski, Nikita Shekutkovski, Connection between strong proximative and strong approximative sequences

Section 2: Complex Analysis, Real Analysis and Functional Analysis

Chair: Paul Gauthier

Room 2

17:20 – 17:40	Samoil Malcheski, Katerina Anevska, Risto Malcheski: A characterization of strictly convex 2-normed space
17:40 – 18:00	Zerrin Önder, Ümit Totur, İbrahim Çanak: Statistical extensions of some classical Tauberian theorems for Cesàro summability of triple sequences
18:00 – 18:20	Dilek Söymelez: On modified Bleimann, Butzer and Hahn approximation operators

Section 3: Differential Equations and Dynamical Systems

Chair: Lazo Dimov

Room 3

17:20 – 17:40	Burcu Silindar Yantir: On integrable extensions
17:40 – 18:00	Boro M. Piperevski: For one system differential equations dual of the system of Lorenz
18:00 – 18:20	Biljana Zlatanovska, Approximation for the solutions of Lorenz System with systems of differential equations

Room 6

17:00 – 18:30	Seminar 2: <i>The role of elementary number theory in teaching mathematically gifted students: opportunities and challenges</i> Speaker: Risto Malčeski
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Workshop FIXED POINT THEORY AND ITS APPLICATIONS

Chair: Erdal Karapinar

Room 4

17:20 – 17:40	Erdal Karapinar: Advances on fixed point theory
17:40 – 18:00	Rezan Sevinik Adıgüzel: Some properties of the q-quadratic lattices
18:00 – 18:20	Ali Uçum: On classification of bi-null curves in R_{-3}^6

INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Luigi Rodino

Room 5

17:15 – 17:55	Jasson Vindas: On general Stieltjes moment problems
17:55 – 18:20	Andreas Debrouwere: Non-triviality of certain spaces of analytic functions. Ultrahyperfunctions and hyperfunctions of fast growth.

18:20 – 18:40 Coffee break

Section 4: Topology, Geometry, Differential Geometry and Mathematical Physics

Chair: Elif Medetoğullari

Room 1

18:40 – 19:00	Vildan Özdemir, Tunahan Turhan, Nihat Ayyildiz: Kinematic geometry of pseudo-spherical evolutes
19:00 – 19:20	Ndriçim Sadikaj, Anila Duka: Equations of motion of classical non-relativistic strings and relativistic strings
19:20 – 19:40	Vildan Özdemir, Tunahan Turhan, Nihat Ayyildiz: Some characterizations of point-line trajectories in Lorentz 3-space
19:40 – 20:00	Ndriçim Sadikaj, Anila Duka: Some examples of Calabi-Yau manifolds

Section 2: Complex Analysis, Real Analysis and Functional Analysis

Chair: Teodor Bylboacă

Room 2

18:40 – 19:00	Samoil Malcheski: Some characterizations of 2-inner product
19:00 – 19:20	Nikola Tuneski, : Some results about a filtration of starlike functions
19:20 – 19:40	Kastriot Zoto, Ilir Vardhami: Common fixed points in b-dislocated metric spaces using (E.A) property
19:40 – 20:00	Behar Baxhaku, Fevzi Berisha: Statistical approximation properties of bivariate extension of q-Lupa-Stancu operators
20:00 – 20:20	Delčo Leškoski

Room 3

18:45 – 20:30	Seminar 2: The role of elementary number theory in teaching mathematically gifted students: opportunities and challenges Speaker: Risto Malčeski
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Section 5: Probability, Statistics, Numerical Mathematics and Optimization

Chair: Aneta Gacovska-Barandovska

Room 4

18:40 – 19:00	Gökhan Özçelik, Cevriye Temel Gencer: A Game Theoretical Approach for Supplier Interdiction on Single Echelon Supply Chain in Competitive Environment
19:00 – 19:20	Esin Avci: Using Informative Prior from Meta Analysis in Bayesian Approach
19:20 – 19:40	Mahmet Ünver, Gökhan Özçelik: Identification of a fuzzy measure that meets redundancy among criteria in multicriteria decision making problems
19:40 – 20:00	Maria Dobрева, Ivan Chenchev: Clinical evaluation of treatment of gingival recessions supported by Bayesian statistics

Section 8: History of Mathematics and Mathematics Education

Chair: Valentina Gogovska

Room 6

18:40 – 19:00	Sava Grozdev, Deko Dekov: Computer discovered mathematics and applications in education
19:00 – 19:20	Risto Atanasov: Online homework systems in Calculus
19:20 – 19:40	Vesna Celakoska – Jordanova, Emilija Celakoska: Mathematical terminology: On the names of fractions in the Macedonian language
19:40 – 20:00	Jasmina Markoska, Gjorgji Markoski: Geometrical solving of some systems of equations
20:00 – 20:20	Atanas Tanusevski, Secrets of mental squaring of two-digit numbers

**INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS
AND PSEUDO-DIFFERENTIAL OPERATORS**

Chair: Ville Turunen

Room 5

18:35 – 19:00	Sanja Atanasova: Asymptotic behavior of distributions and time-frequency analysis
19:00 – 19:25	Gregory Debruyne: Complex Tauberian theorems for Laplace transforms
19:25 – 19:50	Filip Tomic: Beyond Gevrey regularity
19:50 – 20:15	Smiljana Jaksic: Structure theorems for G-type spaces of ultradistributions over \mathbb{R}_+^d

20:30 – 22:00 Dinner

FRIDAY, JUNE 17, 2016

**Section 4: Topology, Geometry, Differential Geometry and
Mathematical Physics**

Chair: Sonja Čalamani

Room 1

9:40 – 10:00	Akifumi Sako: Noncommutative Kähler Manifolds and their Fock representations
10:00 – 10:20	Kostadin Trenčevski: Application of the Geometry of Curves in 3-dimensional Euclidean Space
10:20 – 10:40	Tomi Dimovski, Dončo Dimovski: Convergence of sequences in $(3, j, \rho) - N -$ metrizable spaces, $j \in \{1, 2\}$

Room 2

9:00 – 10:40	Seminar 1: <i>Enhancing mathematical education through combinatorics</i> Speaker: Sava Grozdev
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Students Institute

Chair: Dončo Dimovski

Room 3

9:00 – 9:20	Paolina Gadjulova: Simulation of an ecosystem with three species on a toroidal lattice
9:20 – 9:40	Vera Dimovska: Combinatorial game theory: An analysis of a fair game
9:40 – 10:00	Vanessa Getseva: Haplotype phasing of structural variations in genomes of individuals
10:00–10:20	Filip Selamovski: Analysis of terrorism through game theory

Section 5: Probability, Statistics, Numerical Mathematics and Optimization

Chair: Marija Stanić

Room 4

9:40 – 10:00	Lazim Kamberi, Ylldrita Seferi, Dashmir Ibishi: Using Queueing theory-M/M/1 in Hospital Tetovo
10:00 – 10:20	Milena Kresoja, Marko Dimovski, Irena Stojkoska, Zorana Lužanin: Stochastic approximation with adaptive step sizes for optimization in noisy environment and its application in regression models
10:20 – 10:40	Filip Nikolovski, Irena Stojkovska: Complex-step gradient approximation and performance analysis of nonmonotone optimization algorithms in noisy environment

Section 8: History of Mathematics and Mathematics Education

Chair: Slagjana Jakimovik

Room 6

9:40 – 10:00	Risto Atanasov: Teaching online mathematics course for undergraduate students
10:00 – 10:20	Vesna Celakoska – Jordanova, Emilija Celakoska: Names of foreign mathematicians in the mathematical literature in Macedonian
10:20 – 10:40	Metodi Glavche, Katerina Anevaska, Risto Malcheski: Better integrated teaching of geometry and algebra in primary education

INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Joachim Toft

Room 5

9:45 – 10:25	Michael Reissig: Some non-standard pseudo-calculus in the treatment of dispersive equations
10:25 – 10:50	Dennis Nemzer: Boehmians of L^2 - Growth

10:40 – 11:00 Coffee break

Section 5: Probability, Statistics, Numerical Mathematics and Optimization

Chair: Irena Stojkowska

Room 4

11:00 – 11:20	Veska Noncheva: Imputation of missing categorical values in survey research data
11:20 – 11:40	Aneta Gacovska-Barandovska, Elisaveta Pancheva: An example on application of randomly indexed central order statistics
11:40 – 12:00	Marija Stanić: An optimal set of quadrature rules for trigonometric Polynomials
12:00 – 12:20	Marko Dimovski, Irena Stojkowska: Regularized least-square optimization method for variable selection in regression models
12:20 – 12:40	Stevo Gjorgiev, Vlatko Kochovski: An approach to the income function movement when its components change according to the principle of the geometric progression

Section 8: History of Mathematics and Mathematics Education

Chair: Risto Atanasov

Room 6

11:00 – 11:20	Ana Donevska – Todorova: An overview on the curricula for linear algebra in the Macedonian gymnasiums
11:20 – 11:40	Slagjana Jakimovik: Early learning of mathematics and the use of picture books in teaching
11:40 – 12:00	Borislav Lazarov, Albena Vasileva: Age factor in a math contest paper for 5th and 6th grade students
12:00 – 12:20	Jasmina Markoska, Gjorgji Markoski: Examination of the students' previous knowledge before and after the first year of secondary education
12:20 – 12:40	Valentina Gogovska: Logical fallacies as a tool for empowering students' thinking and reasoning in math classes

Room 2

11:00 – 12:40	Seminar 1: <i>Enhancing mathematical education through combinatorics</i> Speaker: Sava Grozdev
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INTERNATIONAL WORKSHOP ON GENERALIZED FUNCTIONS AND PSEUDO-DIFFERENTIAL OPERATORS

Chair: Michael Reissig

Room 5

11:00 – 11:25	Alessandro Palmieri: Recent progress for wave models with scale invariant mass and dissipation
11:25 – 11:50	Daniel Lorenz: Strictly Hyperbolic Equations with Low-Regular Coefficients with Respect to Time
11:50 – 12:15	Maximilian Reich: Recent Progress on Composition in Weighted Modulation Spaces
12:15 – 12:40	Ivana Vojnovic: H - distributions with unbounded multipliers

12:40 – 14:00 Lunch

14:15 – 19:30 EXCURSION

20:00 – 23:00 FAREWELL DINNER

* Please note that unforeseen program changes may occur during the event.