State University of Novi Pazar

CPMMI 2024

8th International Conference

CONTEMPORARY PROBLEMS OF MATHEMATICS, MECHANICS AND INFORMATICS

Dedicated to
Professor Ćemal Dolićanin
(1945–2023)

Novi Pazar, 2–4 June, 2024

Registration and Agenda

2 June 2024: 11.00 Registration at the State University of Novi Pazar

12.00 Sightseeing of the City and Surroundings

3 June 2024: 08.30–09.00 Registration

09.00 Opening Ceremony

09.15 Working Sessions

19.30 Conference Dinner

4 June 2024: 09.00 Working Sessions

12.00 Closing the Conference

Conference Program

	Monday, 3 June
9.00	**Opening Ceremony (Ceremonial Hall – Rectorate)** **Zana Dolićanin, Full Professor** **Rector SUNP**
9.05–9.10	**Aleksandar Jović,** The Associate of the Minister of Education in the Republic of Serbia
9.10–9.15	**Nihat Biševac,** Mayor of Novi Pazar
9.15–9.40	**Teodor M. Atanacković,** *Ćemal Dolićanin – Life and Work*, Serbia
9.40	**Plenary Session** **Chairmen** **Miodrag Mateljević, Academician of SASA** **Ekrem Savaş, Full Professor**
9.40–10.20	**Stevan Pilipović,** *Generalized Functions over the Spaces with Hörmander Metrics. Some Results and Some Open Problems*, Serbia
10.20–11.00	**Milan Tuba,** *Nature Inspired Algorithms for Artificial Intelligence Models Optimization*, Serbia
11.00	**Coffee Break**
11.15–11.55	**Altai A. Borubaev,** *Generalization of the Main Principles of Functional Analysis*, Kyrgyzstan
11.55–12.35	**Mateja Grašič, Abdul Salam Jarrah, Valery Romanovski,** *Invariants and Reversibility in Polynomial Systems of ODEs*, Slovenia, UAE
12.35	**Coffee Break**
12.50	**Session 1A** **Chairmen** **Stevan Pilipović, Academician of SASA** **Tursun Yuldashev, Full Professor**
12.50–13.10	**Miodrag Mateljević,** *Lorentz Transformation and Time Dilation*, Serbia
13.10–13.30	**Neda Bokan, Srđan Vukmirović,** *Some Classes of Affinely Invariant Metrics on Lie Groups*, Serbia

13.30–13.50	**Ekrem Savaş,** *On Lacunary Strong Invariant Summability of Weight g*, Türkiye
13.50–14.10	**Đorđe Dugošija,** *Characterization of Positive Semidefinite and Positive Definite Matrices in an Elementary Way*, Serbia
12.50	**Session 1B** **Chairman** **Miloš Arsenović, Full Professor**
12.50–13.10	**Vesna Jevremović, Sanela Koca,** *Cryptography Deciphered*, Serbia
13.10–13.30	**Bojana Milošević, Marko Obradović,** *Normality Tests Based on Characterizations*, Serbia
13.30–13.50	**Sanjey Kumar,** *Inventory Model with Price and Trade Credit Demand for Deteriorating Item with Shortage and Preservation Technology*, India
13.50–14.10	**Atif Avdović, Zoran Vidović,** *Long-Term Solution for Misinterpreting p-Values*, Serbia
14.10	**Lunch**
15.00	**Session 2A** **Chairmen** **Teodor M. Atanacković, Academician of SASA** **Neda Bokan, Full Professor**
15.00–15.20	**Dragan S. Đorđević,** *C*-valued Integrals and Applications*, Serbia
15.20–15.40	**Dragan T. Spasić,** *On Nonlinear Nonholonomic Constraints, Possible Accelerations Concept and the Polyakhov Operator*, Serbia
15.40–16.00	**Tursun K. Yuldashev, B. J. Kadirkulov, A. A. Matchanova,** *Mixed Problem for a Hilfer Type Fractional Integro-Differential Equation*, Uzbekistan
16.00–16.20	**Nadica Mihajlović, Dragan S. Đorđević,** *Forward Order Law for the Moore–Penrose Inverse in Rings with Involution*, Serbia

16.20–16.40	**Teodor M. Atanacković, Marko Janev, Stevan Pilipović,** *Thermodynamic Restrictions for a Linear Viscoelastic Model which Involves Distributed Complex Order Fractional Derivatives*, Serbia
16.40–16.55	**Teodor M. Atanacković, Diana Dolićanin Đekić, Ersin Gilić, Enes Kačapor,** *Fractional Dissipation in Generalized Wave Equation in Non-local Elasticity*, Serbia
15.00	**Session 2B** **Chairmen** **Miroslava Petrović Torgašev, Full Professor** **Valery Romanovski, Full Professor**
15.00–15.20	**Ljubiša D. R. Kočinac,** *On Homotopy Properties of LA-Semigroups*, Serbia
15.20–15.50	**Eberhard Malkowsky, Vesna Veličković, Enes Kačapor,** *The Characterizations of Some Classes of Bounded Linear and Compact Operators into the Generalised Hahn Space*, Serbia
15.50–16.10	**Emin Özçağ,** *On the Definition of the Compositions of the Singular Distributions*, Türkiye
16.10–16.30	**Selma Özçağ,** *Selective Covering Properties in Bitopological Spaces*, Türkiye
16.30–16.50	**Ersin Gilić, Penumarthy Parvateesam Murthy, Kavita, Sanjay Kumar, Julijana Lekić,** *Fixed Point of Families of Weakly Compatible Mapping with an Application*, Serbia, India
16.55	**Coffee Break**
17.10	**Session 3A** **Chairmen** **Ljubiša Kočinac, Professor Emeritus** **Dragan Đorđević, Full Professor**
17.10–17.30	**Miloš Arsenović,** *Gelfand Integral for Operator Valued Functions*, Serbia
17.30–17.50	**Tatjana V. Tomović Mladenović, Marija P. Stanić, Aleksandra Milosavljević,** *Anti-Gaussian Quadrature Rules Related to Polynomials Orthogonal on the Unit Semicircle*, Serbia

17.50–18.10	**Aleksandar Aksentijević, Suzana Aleksić, Stevan Pilipović,** *Products in Shift-Invariant Spaces*, Serbia
18.10–18.40	**Irfan Glogić,** *Stable Self-Similar Blowup for the Wave Maps Equation*, Austria
18.40–19.00	**Farkhod G. Mukhamadiev, Anvar K. Sadullaev,** *Some Mengerness Properties of Space of the Permutation Degree*, Uzbekistan
17.10	**Session 3B** **Chairmen** **Diana Dolićanin Đekić, Full Professor** **Selma Özçağ, Full Professor**
17.10–17.30	**Cristina Calineata, Teodor Turcanu,** *On Fixed Proximal Pairs of E_r-mappings*, Romania
17.30–17.50	**Miroslava Petrović Torgašev, Aleksandar Šebeković,** *Three Deszcz Symmetries of Wintgen Ideal Submanifolds*, Serbia
17.50–18.10	**Javid Ali,** *Controllability of ψ-Hilfer Fractional Differential Equations with Infinite Delay*, India
18.10–18.30	**Remzo Destović, Dženisa Pepić,** *The Role of Functional Knowledge and Mapping in Developing Mathematical Competence: An Analysis of the Teacher's Role as a Motivator*, Serbia
19.30	**Conference Dinner**
	Tuesday, 4 June
09.00	**Session 1A** **Chairmen** **Emir Zogić, Assistant Professor** **Milica Anđelić, Assistant Professor**
09.00–09.20	**Bojana Borovićanin, Marija Jerotijević,** *Minimal Harary Index of Graphs with a Given Diameter or Independence Number*, Serbia
09.20–09.40	**Mert Sinan Öz,** *Novel Sombor-Index-Like Topological Indices with Geometry and Calculus*, Türkiye
09.40–10.00	**Saieed Akbari, Irena M. Jovanović, Johnny Lim,** *On the Spectrum, Some Unary Graph Operations and the Energy of Graphs with Self-Loops*, Iran, Serbia, Malaysia
10.00–10.20	**Edin Glogić,** *On Some Bounds for Kirchhoff Index and Their Relation with Other Graph Invariants*, Serbia
09.00	**Session 1B** **Chairman** **Edin Dolićanin, Full Professor**
09.00–09.20	**Batyigul Bayachorova, Pavel Pankov,** *Independent Multimedia Presentation of Natural Languages*, Kyrgyzstan

09.20–09.40	**Gökmen Katipoğlu, Duygu Ergün, Semih Utku, Savaş Takan,** *Ledger Technology-Based Peer Assessment Model*, Türkiye
09.40–10.00	**Jovan S. Milutinović, Petar O. Milić, Slaviša Vučetić,** *Modelling Open Data Based Web Applications*, Serbia
10.00–10.20	**Ejub Kajan, Emir Ugljanin, Ulfeta Marovac, Aldina Avdić, Adela Ljajić,** *Towards Citizen-Centered Smart Services Research Insights from a Project*, Serbia
10.20	**Coffee Break**
10.35	**Session 2A** **Chairmen** **Bojana Borovićanin, Associate Professor** **Mert Sinan Öz, Assistant Professor**
10.35–10.55	**Abdullah Alazemi, Milica Anđelić, Haneen Zaidan,** *Gap Intervals and Convergence of Graph Eigenvalues*, Kuwait
10.55–11.15	**Emir Zogić,** *On Some Spectrum and Distance Based Graph Invariants of Simple Connected Graphs*, Serbia
11.15–11.35	**Izudin Redžepović,** *On the Predictive Applicability of the Local Energy of a Graph*, Serbia
10.35	**Session 2B** **Chairman** **Pavel Pankov, Full Professor**
10.35–10.55	**Irfan Fetahović, Edis Mekić, Kristijan Kuk, Safet Purković, Edin Dolićanin,** *Ethical Guidelines for Open Learning Analytics*, Serbia
10.55–11.15	**Miljan Stevanović, Jelena Pejić, Petar Pejić,** *Virtual Reality Platforms – Playgrounds for Learning*, Serbia
11.15–11.35	**Ulfeta Marovac, Aldina Avdić, Irfan Fetahović, Lejlija Memić, Nataša Đorđević, Zana Dolićanin,** *Comparison of Feature Selection Methods for Biomedical Data Classification*, Serbia
11.35	**Coffee Break**
09.00	**Session 3A (Online Session)** **Chairmen** **Irfan Fetahović, Assistant Professor** **Enes Kačapor, Assistant Professor**
09.00–09.20	**Arslan Hojat Ansari, Liliana Guran,** *Studying the Types of Integral Transformations of p-tuple Nested Functions of Type Trigonometry and Hyperbolic*, Iran, Romania
09.20–09.40	**R. B. Beshimov, R. M. Juraev, R. Z. Manasipova,** *On Some Properties of τ-closed and τ-open Sets*, Uzbekistan
09.40–10.00	**Miljan Knežević,** *Harmonic Quasiconformal Mappings – Some Important Properties and Applications*, Serbia
10.00–10.20	**Umme Zainab,** *Umbral Study of Mittag–Leffler–Laguerre Matrix Polynomials*, India
10.20	**Coffee Break**

10.35	**Session 3B (Online Session)** **Chairmen** **Edis Mekić, Assistant Professor** **Edin Glogić, Assistant Professor**
10.35–10.55	**Osama Burak Elhalid, Edin Dolićanin, Ali Hakan Işık,** *Advanced Leaf Disease Detection: Integrating YOLOv9 with Transfer Learning for Precision Agriculture*, Türkiye, Serbia
10.55–11.15	**Orhan Tug, Eberhard Malkowsky, Vladimir Rakočević,** On Some Generalizations of Hahn Sequence Space h, Iraq, Serbia
11.15–11.35	**Dejan Radović, Edin Dolićanin,** *Application of Digital Models in the Presentation of Relief, Lake Bathymetry, Lake Eyes and Climatic Elements in the Area of the Skadar Lake Region (Montenegro)*, Serbia
11.35–11.55	**R. B. Beshimov, D. T. Safarova,** *Uniform Space and its Hyperspace*, Uzbekistan
12.00	**Closing the Conference**

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