

Conference Program

Monday, June 18th

9.00 **Opening ceremony (Ceremonial Hall -Rectorate)**

Prof. Dr Miladin Kostić, rector SUNP
Prof. Dr C. Dolićanin, Academician of JANN
Academician SASA T. M. Atanacković

9.10 **Plenary Session (Ceremonial Hall -Rectorate)**
Chairmen

Academician SASA, S. Pilipović
Prof. Dr C. Dolićanin, Academician of JANN

9.10-9.40 **Xin-She Yang**, Mathematical Analysis of Swarm Intelligence. UK.

9.40-10.10 **T. Atanackovic, S. Pilipovic**, Application of Caputo-Fabrizio fractional derivative in Mechanics. Serbia.

10.10-10.40 **V. Romanovskij**, Invariants and time-reversibility in polynomial differential systems. Slovenia.

10.40-11.10 **R. Unland**, A Novel Holonic Architecture for a Medical Diagnosis System Based on MAS Technology and Swarm Intelligence. Germany.

11.10 **Coffee break**

Ceremonial Hall -Rectorat

11.30 **Session 1**
Chairmen
Prof. Dr Vladimir Rakocevic
Prof. Dr Dragan Djordjevic

11.30-11.50 **S. Pilipovic, B. Prangoski, J. Vindas**, Pseudo-differential operators of infinite order. Serbia, Belgium.

11.50-12.10 **M. Spies**, Statistical learning of reusable topics with minimally smoothed document topic models. Germany.

12.10-12.20 **И.А. Соловьев, Д. Долличанин-Декич,**
СТОХАСТИЧЕСКАЯ МОДЕЛЬ ЗАДАЧИ АБЛЯЦИИ.
Russia, Serbia.

12.20-12.30 **V. Velickovic**, Visualization of the spaces C_p and their duals. Serbia

12.30-12.40 **S. Aleksic, S. Dimitrijevic, T. V. Tomovic**, The existence of a positive solution for nonlinear fractional differential equations with integral boundary value conditions. Serbia

12.40-12.50 **D. Bogdanović, K. Lazarević, Z. Dolićanin**, Statistical methods in medical researches: trends, errors, and guidelines for appropriate usage. Serbia.

12.50-13.00 **N. Glišović, N. M. Ralević, D. Čebić**, A variant of McDougall-Wotherspoon method for finding simple roots of nonlinear equations. Serbia.

13.00-13.10 **K. Stevanović, J. Maksimović, M. C. Pagnacco, S. Maćešić, Lj. Kolar-Anić**, Parametric analysis of the model of Bray-Liebhaftsky non-linear reaction system. Serbia

13.10 **Lunch**

14.10 **Session 2**
Chairmen
Academician SASA, T. M. Atanackovic
Prof. Dr D. C. Dolicanin-Djekic

14.10-14.25 **E. Malkowsky**, On some results using measure of noncompactness. Germany.

14.25-14.35 **M. Knezevic**, Distance in the absolute plane and Cauchy functional equations. Serbia

14.35-14.45 **Miodrag Mateljevic, Miljan Knezevic**, Some properties of HQC mappings and elliptic PDE's. Serbia

14.45-14.55 **Dj. Dugosija**,

14.55-15.05 **J. Vukmirovic**, A Simpler Proof of the Paley-Wiener-Zygmund Theorem. Serbia.

15.05-15.20 **T. Atanackovic, M. Janev, S. Pilipovic**, Waves in viscoelastic media described by fractional derivatives with regular kernels. Serbia.

15.20-15.30 **B. Borovicanin, E. Zogic**, Some new bounds on Randić energy. Serbia.

15.30-15.40 **E. Zogic, B. Borovicanin, E. Milovanovic, I. Milovanovic**, Randić degree-based energy of graphs. Serbia.

15.40-15.50 **E. Glogic, M. Matejic, E. Milovanovic, I. Milovanovic**, On some lower bounds for the Kirchhoff index. Serbia.

15.50-16.05 **A.A. Tikhonov, L.F. Shcherbakova**, On attitude motion of electrodynamic space tether system, Russia.

16.05- **D. Šumarac, P. Knežević, Č. Dolićanin**, Preisach model

16.15 of hysteretical behaviour of mild steel under axial cyclic loading. Serbia.

16.15-16.25 **L. Cveticanin**, Vibration of mass-in-mass units of the elastic metamaterial. Serbia.

16.25 **Coffee break**

16.45 **Session 3**
Chairmen
Prof. Dr E. Milovanović
Prof. Dr V. Soloviev

16.45-16.55 **N. Glisovic, T. Davidovic, M. Raskovic**, Clustering incomplete data by bee colony optimization: two case studies. Serbia

16.55-17.05 **U. Marovac, A. Ljajic, A. Avdic, E. Kajan**, Towards the lexical resources for sentiment-reach informal texts – the Serbian language case. Serbia.

17.05-17.15 **E. Ugljanin, D. Stojanovic, E. Kajan, Z. Maamar**, Reconfiguration of IoT in a Smart City based on interactions with citizens using social media. Serbia, UAE.

17.15-17.25 **A. Ljajic, M. Stankovic, U. Marovac**, Determining the scope of negation using the methods of machine learning. Serbia.

17.25-17.35 **V. Stanković**, Angle estimation of a single complex exponential signal using angle invariant combining. Serbia

17.35-17.45 **A. Avdić, D. Janković**, Healthcare in Smart Cities – Privacy and Security Issues. Serbia.

17.45-17.55 **E. Kahrović, E. Mekic**, Artificial intelligence in human resources management. Serbia.

17.55-18.05 **Safet Purkovic, Edis Mekic, Ahmedin Lekpek**, Feasibility of compromising ledger system based on P2P blockchain technology. Serbia.

19.15 **Conference Dinner**

Tuesday, June 19th

9.00	Plenary Session (Ceremonial Hall -Rectorat) Chairmen Prof. Dr I. Milovanović Prof. Dr S. Makrushin
9.00-9.20	V. Rakocevic , Discontinuity at fixed point. Serbia.
9.20 – 9.40	D. S. Djordjevic , Frechet derivative and analytic functional calculus. Serbia.
9.40-10.00	B. Miric , Physical Interpretation of Doppler Radar Spectral Moments and Beyond. Serbia.
10.00	Coffee break (Ceremonial Hall -Rectorat)
10.20	Session 1 Chairmen Prof. Dr B. Mirić Prof. Dr Ejub Kajan
10.20-10.35	V. Soloviev , A Machine Learning Approach for Student Engagement Automatic Recognition from Facial Expressions. Russia.
10.35-10.50	S. Makrushin , Analysis of Structure Formation for the Russian Segment of Wikipedia. Russia.
10.50-11.05	M. Koroteev , Machine Learning Models Overfitting and Generalization in Very Big Datasets. Russia.
11.05-11.15	Ž. Barbarić, B. Bondžulić, S. Mitrović , Passive ranging in single-band infrared video sequence. Serbia.
11.15-11.30	V. Feklin , A Machine Learning Approach for Commercial Banks Financial Stability Identification and Evaluation. Russia.
11.30-11.45	V. Ivanyuk , Phase Model of Asset Crises Identification. Russia.
11.45-12.00	E. Zolotareva , Machine Learning Techniques for Stock Market Trends Identification. Russia.
12.00-12.15	G. Katıpoğlu, M. Cengiz , Obstacle Avoiding Robot. Turkey.
12.15-12.25	E. Dolicanin, I. Fetahovic , Brainstorm optimization algorithm for UCAV path planning. Serbia.
12.25-12.35	A. Pavlović , Application of multifractals for copy-move forgery detection, Serbia.
12.35	Coffee break

12.55 Closing of the Conference
13.15 Sightseeing of the city and surrounding

State University of Novi Pazar
Department of Mathematical Sciences
organizes
5th International Conference
**CONTEMPORARY PROBLEMS OF MATHEMATICS,
MECHANICS AND INFORMATICS (CPMMI 2018)**

Conference Chairman

Prof. Dr Cemal Dolicanin, Academician of JANN
State University of Novi Pazar

Basic information

**5th International Conference "CONTEMPORARY
PROBLEMS OF MATHEMATICS, MECHANICS AND
INFORMATICS "** will be held at The State University of
Novi Pazar, **17, 18 and 19. June 2018**, Novi Pazar.

Registration and Agenda

17. June 2018. registration on the State University of Novi Pazar or Hotel Vrbak, from 12:00.

18. June 2018. 9:00 Opening ceremony

19. June 2018. 9:00 Working sessions

12:35 Conference session ending

13:15 Sightseeing of the city and surrounding

Conference Secretariat

The correspondence should be performed via Conference Organizing Committee

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Accommodation

Accommodation is organized in cooperation with State university of Novi Pazar, at the hotel "VRBAK". Hotel "Vrbak" is located in the center of Novi Pazar. Below the hotel, the river Raska flows. With its distinctive architecture, internal and external environment, it leaves a strong impression to the passers-by.

State University of Novi Pazar



CPMMI 2018
5th International Conference

**CONTEMPORARY PROBLEMS
OF MATHEMATICS,
MECHANICS AND
INFORMATICS**



Novi Pazar, 17-19 June 2018.