International Conference on Computer Science and Mathematics

Dedicated to prof. Smile Markovski

📅 21 May – 23 May 2024   📍 Ohrid, North Macedonia

The organization of the international conference dedicated to the Macedonian scientist Smile Markovski is a tribute to the 75 years of live and work done both as a professor at the Faculty of Natural Science and Faculty of Computer Science and Engineering, Ss. Cyril and Methodius University in Skopje, and as a well-known researcher in the Republic of N. Macedonia and abroad, mainly in the areas of quasigroup theory, quasigroup-based cryptography and coding theory.

The conference will constitute a good opportunity to promote new achievements in the field of computer science, and mathematics.

The main goal is to offer a place for networking and discussions of both experienced and young researchers from many countries. We strongly encourage young researchers to participate with extended abstracts and scientific reports, as the conference represents a good opportunity for sharing their ideas, which are relevant for the whole scientific society.

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C	Y	P	C	O	R	T
R	T	O	Y	R	P	C
Y	P	T	R	C	Y	O
P	O	C	P	Y	T	R
T	C	R	T	P	O	Y
O	R	Y	O	T	C	P

⚷ Keynotes

Aleksandar Krapez

Mathematical Institute, Serbian Academy of Sciences and Arts, Serbia
Title: **Generalized balanced functional equations on groupoids with quasiunits**

Žarko Mijajlović

Faculty of Mathematics, University of Belgrade, Serbia
Title: **Some practical uses of quantifier elimination**

Melanija Mitrović

Head of CAM-FMEN
Faculty of Mechanical Engineering, University of Niš, Serbia
Title: TBA

🗓 Important Dates

~~31 March 2024~~
20 April 2024
Abstract Submission Deadline

~~15 April 2024~~
3 May 2024
Author Notification

15 May 2024
Registration

📄 Call For Papers

Conference Aims and Scope

The main objective is to connect all collaborators, colleagues and respecters of the work of Prof. Smile Markovski. The conference is devoted to exploring and presenting original innovative applications, scientific and technological advancements in the field of applied and theoretical mathematics and computer science. The conference will consist of regular sessions with presentations of papers reviewed and selected by an international program committee, as well as invited talks presented by reputable scientists and close friends of Prof. Markovski. The official languages of the conference will be English and Macedonian.

Topics

Authors are invited to submit abstracts of works in relevant fields, including, but not restricted to:

- Theory of Quasigroups
- Algebra and its Applications
- Information Theory
- Cryptography and Cryptanalysis
- Sets and Mathematical Logic
- Computer Science
- Coding Theory
- Algorithms and Complexity
- Information Security
- Applied Mathematics

Abstract Submission

Authors are invited to submit abstracts in English (up to 2 pages) in latex/word and .pdf format. The .pdf version of the abstract should be submitted through the EasyChair Conference Management System and the Latex/Word file should be sent on the conference email csm@finki.ukim.mk. At least one author of each accepted abstract is required to register for the Conference.

Publications

All accepted abstracts will be published in a Book of abstracts of the conference.

The presentation with the best results in the field of algebraic structures and their application, according to the Organizing Committee, can be extended to a full paper and published in the international journal Quasigroups And Related Systems.

There is a possibility of publishing of full paper in Balkan Journal of Applied Mathematics and Informatics (BJAMI). If someone wants to publish a full paper in this journal can send it to csm@finki.ukim.mk until to September 1, 2024.

€ Conference Fees

Regular Fee
€ 50

Book of Abstracts

Conference Material

Student Fee
€ 30

Book of Abstracts

Conference Material

Conference Dinner

Attendance-Only Fee
€ 30

Conference Dinner

Register now

🕐 Schedule

Thuesday, 21 May 2024		
10:00-11:30	Registration	
11:30-12:00	Welcome coffee break	
12:00-13:00	Opening ceremony	
13:00-14:00	Invited talk (Hall 1)	
	Aleksandar Krapezh: Generalized balanced functional equations on groupoids with quasiunits	
14:00-15:30	Lunch break	
15:30-17:30	Session 1 (Hall 1) Chair: Lidija Gorachinova Ilieva	Session 2 (Hall 2) Chair: Aleksandra Popovska Mitrovikj
15:30-15:45	Zoran Sunic: On laconic semigroups and grupoids	Mile Jovanov, Marija Mihova, Nevena Ackovska, Vesna Dimitrova: Reflection on the Achievements and Results of Center for Digitization of the National Heritage of Macedonia
15:45-16:00	Violeta Vasilevska: Zero Forcing, Power Domination, and some Variants	Simon Atanasovski and Elissa Mollakuqe: Numbers Behind Cyber Defenses: A Statistical Exploration of North Macedonian Digital Security
16:00-16:15	Harald Woracek: Embeddings of a product of free convex semilattices	Elissa Mollakuqe, Vesna Dimitrova and Shasivar Rexhepi: Random Selection Classification of Finite Groupoids of Various Order
16:15-16:30	Ana Sokolova: Monads and (free) algebras for probability and nondeterminism	Bojana Taseva, Aleksandra Brashnarova, Aleksandra Mileva and Dushan Bikov: HTTP Security Headers Analysis of Several Categories Macedonian Websites

16:45	approach in defining some topological notions	Data standardisation in OT Environments using PackML: A Use Case
16:45-17:00	Natasha Ilievska: A Note on the Quasigroup Based Code for Error Detection	X. Liu, A.S. Meijnikman, A.L. Mak, A.G. Holleboom, N.A.W. van Riel, P.A.J. Hilbers, D. Boshnachki: Machine Learning Based Clinical Scoring of Whole Slide Images for Nonalcoholic Fatty Liver Disesase
17:00-17:15	Jovan Simonoski: A Comprehensive Survey and Analysis on Finite Field Arithmetic for Cryptographic Applications with Efficient Software Implementation in C	Marjan Gushev: Why AI is Not What We Like to Be
17:15-17:30	Irina Radilova, Victor Shcherbacov: Some Schroder T- quasigroups,	Samir Jakupi, Elissa Mollakuqe and Arber Parduzi: Optimizing Network Performance: A Comparative Analysis of IPv4 and IPv6 Protocols in the Context of Information Security
17:30-18:00	Coffee break	
18:00-20:00	Social activities	
20:00	Dinner	

Wednesday, 22 May 2024		
09:00-09:30	Registration	
09:30-10:30	Invited talk (Hall 1)	
	Melanija Mitrovikj: Lecture on constructive semigroups with apartness	
10:30-11:00	Coffee break	
11:00-13:00	Session 3 (Hall 1) Chair: Verica Bakeva	Session 4 (Hall 2) Chair: Aleksandra Mileva
11:00-11:15	Zaneta Popeska: Sampling Space and Statistics on a Sample as an Element of a Semigroup	Stevo Bozhinovski: On two operators in number theory and divergent series
11:15-11:30	Petar Jolakoski, Aleksandra Popovska-Mitrovikj and Verica Bakeva: The role of stochastic resetting and 1-D confining potential in optimizing the mean first passage time of an additive trichotomous noise	Bojan Ilijoski and Nevena Ackovska: Exploring data from SPACE protocol
11:30-11:45	Stefan Mirchevski and Verica Bakeva: A progression-based sensitivity analysis for cost function parameters of a single-server queueing system with two phases of customer service	Andrea Kulakov: Blockchain for trusted open-sourced surveillance systems in the democratic society
11:45-12:00	Valentina Miovska, Vesna Celakoska-Jordanova: Compatible binary relations on vector valued hypersemigroups	Natasha Stojkovikj, Maja Kukusheva Paneva, Cveta Martinovska Bande and Dushan Bikov: Machine learning models for prediction of covid-19 infection in North Macedonia
12:00-12:15	Vesna Dimitrievska Ristovska and Petar Sekuloski: Topological data analysis as a tool for classification of digital images	<mark>Marija Miteva and Limonka Koceva Lazarova: Application of Algebras in Evaluating Products of Distributions</mark>
12:15-12:30	Vassil Grozdanov, Elmi Shabani: Some applications of the function system 𝔹Bs to the theory of the uniformly distributed sequences	Biljana Zlatanovska, Mirjana Kocaleva Vitanova and Dimitar Nakov: SIRS+P model of cow mastitis
12:30-12:45	Adrijan Božinovski: Results of the Ramanujan Summation Function upon a Triangular Number Series Family of Infinite Series	Ana Marija Atanasovska and Marija Mihova: Parallelization of Algorithms for Finding Minimal Paths in Two-Terminal Multi-state Networks
12:45-13:00	Adrijan Božinovski: On Two Sequences Published in the Online Encyclopedia of Integer Sequences	Katerina Zdravkova: Does humanity need computer scientists?

15:00-16:00	Invited talk (Hall 1)
	Zharko Mijajlovikj: Some practical uses of quantifier elimination
16:00-16:30	Coffee break
16:30-19:30	Social activities
20:00	Closing ceremony/Gala Dinner

👥 Organizer

Conference Chair

Vesna Dimitrova
Cyril and Methodius University (N. Macedonia)

Organizing Committee

Verica Bakeva Smiljkova
Cyril and Methodius University (N. Macedonia)

Lidija Goracinova-Ilieva
University of Skopje (N. Macedonia)

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Limonka Koceva Lazarova
Goce Delcev University (N. Macedonia)

Elissa Mollakuqe
Kadir Has University (Turkey)

🏛 Additional Information

Venue

The conference venue is Congress Center, located by the beautiful Ohrid Lake.

Travel Info

Ohrid St.Paul The Apostle Airport
Skopje International Airport

Nestled in the southwestern part of Macedonia, the city of Ohrid stands as a captivating destination that seamlessly blends rich cultural heritage, breathtaking natural landscapes, and delectable culinary delights. With a history spanning over 2,000 years, this enchanting city has earned its place as a UNESCO World Heritage site, attracting travelers from around the globe. Ohrid's cultural heritage is truly awe-inspiring. Read More

More information about Ohrid and Macedonia can be found at: Exploring Macedonia Macedonia Timeless

Book of abstracts

You can download the CSM 2024 Book of abstracts from the following LINK.

Images

You can view/download/upload images from the CSM 2024 the following LINK.