# The 9th International Scientific Colloquium MATHEMATICS AND CHILDREN

founded by Margita Pavleković

# **PROGRAM**

## FRIDAY, May 19

8.00 - 9.00	Registration
9.00 - 9.30	<b>OPENING</b>

#### **Morning Session**

Room 31 / Chairperson: Diana Moslavac Bičvić	
9.30 - 10.15	Plenary lecture  Milena Stavric, Albert Wiltsche  Spatial Ability In the Digital Age - Designing innovative analogue games
10.15 - 10.30	Attila Bölcskei Connecting statistics with spatial abilities
10.30 - 10.45	András Ambrus, Pál Katonka "Seeing" at solving algebraical problems
10.45 - 11.00	Ljiljana Arambašić On the teaching of linear algebra

11.00 - 11.30 Coffee Break

Room 31 / Chairp	Room 31 / Chairperson: Ljerka Jukić Matić	
11.30 - 11.45	Doris Dumičić Danilović, Sanja Rukavina On the use of visualization when performing basic arithmetic operations	
11.45 - 12.00	Ana Krišto, Ana Kuzle, Dubravka Glasnović Gracin  Collective classroom climate in geometry lessons	
12.00 - 12.15	Janka Szeibert, Csilla Zámbó, Anna Muzsnay, Csaba Szabó  The potential of number theory in the development of mathematical thinking	
12.15 - 12.30	Adrijana Mastnak, Tatjana Hodnik  Preschool teacher's planning and implementation of dialogic teaching in dealing with combinatorics situations	
12.30 - 12.45	Branka Antunović Piton Implementation of scientific findings in the 7th-grade teaching process - Preliminary results of collaborative action research	
12.45 - 13.00	Sanja Vranić Fermi problems as a mathematical modeling activity in secondary education	

#### **Afternoon Session**

Room 31 / Chairperson: Ljerka Jukić Matić	
14.00 - 14.45	Plenary lecture  Jasmina Milinković  Representations in mathematics teaching - How to make a choice?
14.45 - 15.00	Vida Manfreda Kolar, Klara Paulič, Uršula Podobnik  The role of mathematical picture books in teaching the concept of zero to first grade
15.00 - 15.15	Eszter Kónya, Ibolya Szilágyiné-Szinger  On the experience of a problem-posing activity with second grade primary school pupils

15.15 - 15.30 Coffee Break

13.00 - 14.00 Lunch

#### A section

Room 31 / Chairperson: Ana Mirković Moguš	
15.30 - 15.45	Bojan Crnković, Vedrana Mikulić Crnković, Ivona Traunkar Development of computational thinking through interdisciplinary activities in mathematics education
15.45 - 16.00	Tomislav Rudec, Anja Šteko Advanced education methods and application of mathematical knowledge in classes with advanced programmers
16.00 - 16.15	Saša Duka, Ružica Kolar-Šuper, Zdenka Kolar-Begović The specifics of solving mathematical problems using model based on the Tablet-Human Hybrid Model of Avatar in university face-to-face teaching
16.15 - 16.30	Lidija Eret, Marjana Kuliš  Hybrid teaching and outcome indicators of the state graduation exam in mathematics



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<b>B</b> section		
Room 21 / Chairperson: Ana Katalenić		
15.30 - 15.45	Marijana Zeljić, Milana Dabić Boričić, Svetlana Ilić Superficial strategies in solving compare-combine problems	
15.45 - 16.00	Sanja Rukavina, Doris Dumičić Danilović, Marina Šimac  Mathematics teachers' continuous professional development - Reflections on  Lifelong Learning Program "Enactive Learning in Mathematics"	
16.00 - 16.15	Hana Čadež, Ana Brudar  The importance of the mathematics teacher and special educator working together to support low-achieving pupils in mathematics	
16.15 - 16.30	Edith Debrenti, Tünde Klára Baranyai  Analysis of logical operational abilities and logical reasoning among university students	

16.45 Excursion and Colloquium Dinner (Erdut, Stari mlin)

## SATURDAY, May 20

#### **Morning Session**

Room 31 / Chairperson: Mihaela Ribičić Penava	
9.00 - 9.45	Plenary lecture  Mirela Jukić Bokun, Ljerka Jukić Matić  Game-based learning in mathematics
9.45 - 10.00	Eleonóra Stettner STEAM-BOX project
10.00 - 10.15	Monika Zupančić, Tatjana Hodnik  The traditional—contemporary construct in relation to the learning paradigms in the discipline of didactics of mathematics
10.15 - 10.30	Josipa Čuka, Maja Cindrić, Maja Čuletić Čondrić  Teacher's beliefs about teaching mathematics and teaching practice in Croatian primary schools

#### A section

Room 31 / Chairperson: Zdenka Kolar-Begović	
11.00 - 11.30	Emil Molnár On Kárteszi points of a triangle, via three reflections theorem and geometric algebra
11.30 - 11.45	Maja Čuletić Čondrić, Maja Cindrić, Josipa Čuka  The importance of thought transformations in learning geometry based on Van  Hiele's theory
11.45 - 12.00	Nikolina Kovačević Learner-generated drawings in mathematics: Who? When? How?
12.00 - 12.15	Marija Jakuš Sudoku puzzle
12.15 - 12.30	Maja Cindrić, Josipa Čuka, Maja Čuletić Čondrić  Mathematics teaching in public schools in Croatian countries in the era of proto- modernization

### **B** section

Room 22 / Chairperson: Karolina Dobi Barišić	
11.00 - 11.15	Zoran Horvat, Ružica Jurčević  Digital pedagogy and teaching mathematics - Trends, perspectives, limitations and challenges
11.15 - 11.30	Ivana Đurđević Babić, Natalija Bošnjaković  Decision trees in research on mathematics in elementary school
11.30 - 11.45	Dubravka Glasnović Gracin, Ana Krišto Requirements in digital mathematics textbooks: Development of the framework for task analysis
11.45 - 12.00	Anja Horvat, Hana Horvat, Hanna Jakovac, Anamarija Kanisek, Ana Katalenić Word problems in the textbooks for primary mathematics education in Croatia
12.00 - 12.15	Goran Trupčević, Anđa Valent, Ana Žgaljić Keko Discipline of noticing – The case of three university teachers
12.15 - 12.30	Darija Marković, Ljerka Jukić Matić  Games in mathematics classroom: What do teachers and students think about them?
12.30 - 12.45	Ljiljanka Kvesić, Maja Zubac, Marina Lasić  Mathematical teaching of preschool children through elements of performing  arts

13.00 CLOSING LUNCH