







**University of Szeged** 

**UNS**, Faculty of Sciences

Non-Standard Forms of Teaching Mathematics and Physics: Experimental and Modeling Approach

## Novi Sad—Szeged

## Winter School on

## Non-Standard Forms of Teaching Mathematics and Physics: Experimental and Modeling Approach

Novi Sad, February 6<sup>th</sup> -8<sup>th</sup>, 2015













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## **Programme**

Friday, February 6 <sup>th</sup> , 2015			
A1, Department of mathematics and informatics			
12.00 – 13.30	Registration		
13.30 – 13.45	Opening address		
	Introduction IPA Project MATHPHYS–BRIDGE		
13.45 – 14.45	János Karsai: Teaching Math for Applied Sciences		
14.45 – 15.45	Marko Nedeljkov: Mathematical modeling in Physics		
15.45 – 16.00	Coffee break		
16.00 – 17.00	Mirjana Mikalački: Positional games on graphs		
17.00 – 18.30	High school student presentations		
	Kristina Silađi: On the Impossibility of some Geometrical Constructions		
	Jovan Jeromela: On the visualization of definite integral		
	Stojan Važić: Database in Java		
	Nikola Zeljković: Information system for trade business support		
	Žutić Matija, Zeljković Miljana, Slović Milica, Ivanovski Marija, Nikola Popov, Aleksandar Ćirić: Platonic solids in ecology, electrical engineering and economics- lesson review		
18.30 –	Welcome reception		









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Saturday, February 7 <sup>th</sup> , 2015			
9.00 – 10.00	Srdjan Skrbić: Parallel Scientific Computing at the	University of Novi Sad	
10.00 – 12.00	Researchers, PHD Students, Math Teachers (A5) Sanja Konjik: The properties of fractional calculus Đurđica Takači, Ivana Milanović: Function given integral, visualization of fractional calculus (workshop on computer)	High School students (A1)  Srdjan Skrbić: Wolfram Alpha in learning mathematics	
12.00-12.30	Lunch break with Coffee		
12.30 – 13.30	Researchers, PHD Students, Math Teachers (A5) Gergely Röst: Take a shower like a mathematician! - an introduction to time delays	High School students (A1)  Đurđica Takači: GeoGebra in learning mathematics	
13.30 – 15.00	Researchers, PHD Student	Math Teachers (RC10)	
15.00 – 15.30	Maria Vittoria Barbarossa: Introduction to Mathematical Epidemiology  Kyeongah Nah: Mathematical modelling of vector-borne disease  Eva Jungabel: On homomorphism-homogeneous point-line geometries II  Coffee break and snacks	Olivera Klisurić: Biopack in teaching physics (Biopack training)	
15.30-17.30	Researchers, PHD Students (RC10)	Math Teachers and High School students (A5)	
	Olivera Klisurić: Biopack in teaching physics (Biopack training)	Jelena Tatar: Parametric preserntation of Functions  Radoslav Božić: Dinamic geometry and paramteric presenation of functions  Vanja Kostić, Tanja Sekulić: Mathematical modelling in physics Ivana Antic: Games in Math  Aleksandar Milenkovic: Mathematical modelling with Mathematica  Tatjana Stanković, Zoran Radović, 1+1=????  Marina Jokić: Dynamic software in solving mathematical problems	
17.30–19.30	Math Teachers, Researchers, PHD Students Workshop: Đurđica Takači: The graph of parame geometry	tric functions given with parameter and dynamic	









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Sunday,	February <i>8<sup>th</sup>,</i> 2015		
8.00 – 9.00	Math Teachers (RC10)		
	Đurđica Takači: Workshop: Functions given with pameter Illusions		
9.00 – 10.15	Researchers, PHD Students, Math Teachers (A5)		
	Mirjana Jovanovic: Mathematical modelling		
	Đurđica Takači, Gordana Stankov, Ivana Milanović: Examining functions-collaborative learning		
	Vladimir Francisti: The Platform for Initial Test of Students Knowledge		
10.15 – 10.45	Coffee break		
10.45-11.45	Researchers, PHD students RC10	Teachers and high school students A1	
	Arpad Takaci: Mathematical modelling	Attila Mader: Tablets as a tool for learning	
	<i>Želko Lučić</i> : Monte Carlo simulations with Marko		
	chains and Metropolis – Hastings algorithm		
	Nemanja Todorović: Simulation of traffic lights,		
	Junctions		
11.45 – 12.45	Researchers, PHD students RC10	Teachers and high school students A5	
	Sanja Teodorovic: Analysis of mathematical	Peter Eszteleczki, Gábor Kőrösi: E-learning and	
	models in medicine and sciences	M-learning in Serbia and abroad (presentation	
		of a self-developed educational framework	
		system)	
12:45-13:15	Closing Conference		
13.15–14.15	Lunch		
14.15–16.00	Math Teachers (RC10)		
	Workshop: GeoGebra in teaching		