13th International ISAAC Congress August 2–6, 2021 - Ghent, Belgium

Conference programme



Overview

Ple	Plenary lectures and events				
1	Applications of Dynamical Systems Theory in Biology	6			
2	Challenges in STEM Education	7			
3	Complex Analysis and Partial Differential Equations	8			
4	Complex Variables and Potential Theory	9			
5	Constructive Methods in the Theory of Composite and Porous Media	10			
6	Function spaces and their applications to nonlinear evolution equations	11			
7	Generalized Functions and Applications	12			
8	Harmonic Analysis and Partial Differential Equations	13			
9	Integral Transforms and Reproducing Kernels	14			
10	Operator Theory and Harmonic Analysis	15			
11	Operator Theory and Time-dependent PDEs	16			
12	Partial differential equations on curved spacetimes	17			
13	Pseudo Differential Operators	18			
14	Quaternionic and Clifford Analysis	19			
15	Recent Progress in Evolution Equations	20			
16	Wavelet theory and its Related Topics	21			

	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-10:00	10	2,4,8,10	4,6,10,11,14	3,6,7,8	1,3,6,7
		11,13	+ JOINT (7,8,13)	12,14,16	8,14,16
10:00-10:30	Break	Break	Break	Break	Break
10:30-12:00	10,15	2,4,8,10	4,6,10,11,14,15	3,6,7,8	1,3,6,7
		11,13,15	+ JOINT (7,8,13)	12,14,16	8,14,16
12:15–13:00	Opening	Break	Break	Break	Break
13:00-14:00	de Hoop	Break	Break	Break	Break
14:00-15:00	De Philippis	Kaltenbacher	Kuijlaars	Jaffard	Seip
15:00–16:30	2,3,5,7,8,14	1,3,5,7	1,3,7,8,10,12,14	2,4,5,8,10	4,9,10,15
		9,12,14		13,14,15	
16:30-17:00	Break	Break	Break	Break	Break
17:00-19:00	2,3,5,7,8,14	1,5,7	1,3,7,8,10,12,14	2,4,5,8,10	4,10
		9,12,14		13,14,15	
					18:30 Closing

All times are in time zone UTC+2.

Session 2 Challenges in STEM Education

	Monday	Tuesday	Wednesday	Thursday	Friday
8:30		Wijaya			
9:00		Putra			
9:30		Toiganbayeva			
10:00		Break			
10:30		Zhunussova			
11:00		Jancarik			
11:30		Ferdianova			
12:00	12:15: Opening	Break			
13:00	de Hoop	Break			
14:00	De Philippis	Kaltenbacher	Kuijlaars	Jaffard	Seip
15:00	Körtesi			Sajka	
15:30	Václavíková			Zemanová	
16:00	Velichová			Santos	
16:30	Break			Break	
17:00	Korenova			Hritonenko	
17:30	Lavicza			Hvorecky	
18:00	Papp			Nevřelová	
18:30					Closing

Organizers: Ján Gunčaga and Vladimir Mityushev

etc.).

Challenges to the development of effective creativity Zhanat Zhunussova

Al-Farabi Kazakh National University, Kazakhstan zhunussova777@gmail.com Joint work with V. Mityushev, Ye. Ashimov, M. Rahmani, H. Noori

One of the key problems for students, especially from developing countries during pandemic is a lack of the electronic materials. Obviously, there are a lot of problems arise during education in the online regime. First of all, it is a weak Internet connection and combined with the lack of a appropriate equipment. Even having a higher quality computer they could not setup a program. It is connected to the both their knowledge and the specialty. For example, the students biology, chemistry, philology and others are not taught to the skills of a programmer. In general, they are users as ordinary people. But the real situation concerning pandemic is required its own rules. And these rules for all of the students in a group, do not depend on a country. That is why the math teachers have to look for an alternative method to make a proper decision for a stated problem under supervision of a diploma work. Modern computer programs improve the visualization tool which helps to select an optimal model for the considered problem. Especially, this concerns students of the specialties "Mathematics" and "Automation and control". We pay attention to the textbook [1]. It plays the role of a guidance for teachers as well as for students. The textbook establishes the general principles and methods of mathematical modeling. At the beginning a simple mathematical model is considered. The model is explained by hand calculations as well as applying the packages Mathematica and Matlab. There are examples. The textbook is useful for beginners as well as for higher qualified specialists. [1] V. Mityushev, W. Nawalaniec, N. Rylko, Introduction to Mathematical Modeling and Computer Simulations, CRC, 2018.