#### Dragovich 80

# International Conference NONLINEARITY, NONLOCALITY and ULTRAMETRICITY

Belgrade, 26-30. 05. 2025.

FRIDAY, 30. 05. 2025.

## Serbian Academy of Sciences and Arts (SANU)

Knez Mihailova Street 35

Friday: PLENARY SESSION (ACADEMY: LECTURE HALL 2 at 1st floor)					
8:30 - 9:05	35'	Irina AREFEVA*	On relations between the real Kähler and the complex Hilbert Spaces quantum mechanics		
9:05 - 9:40	35'	Igor VOLOVICH*	Real Quantum Mechanics in a Kähler Space		
9:40 - 10:15	35'	Dmitry KAZAKOV*	Quantum corrections to cosmological potentials and the origin of the cosmological constant		
10:15 – 10:45	30'	Coffee Break			
10:45 – 11:20	35'	Nediljko BUDISA	Rewriting life's alphabet: Genetic code expansion and the rise of Xenobiology		
11:20 – 11:55	35'	Marko DJORDJEVIC	Nonlinear Dynamics of Toxin-Antitoxin Systems in Regulating Gene Transfer and Persistence		
11:55 – 12:30	35'	Amare ABEBE	Some cosmological viability constraints of modified gravity		
12:30 - 14:00	90'	LUNCH			

\* – online talk

Nonlinearity, Nonlocality and Ultrametricity

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## Serbian Academy of Sciences and Arts (SANU)

Knez Mihailova Street 35

Friday: SESSION – I (ACADEMY: LECTURE HALL 2 at 1st floor)					
14:00 – 14:35	35'	Sergei ODINTSOV*	Cosmic evolution and black holes in modified gravity		
14:35 – 15:10	35'	Emmanuel SARIDAKIS*			
15:10 – 15:45	35'	Alexander ZAKHAROV*	Cosmology: 100 years after A. A. Friedmann		
15:45 – 16:15	30'	Coffee Break			
16:15 – 16:50	35'	Sergey VERNOV*	New slow-roll approximations for inflationary models with the Gauss-Bonnet term and nonminimal coupling		
16:50 – 17:25	35'	Ekaterina POZDEEVA*	Primordial Black Holes in Induced Gravity		
17:25 – 17:35	10'	CLOSING (Lecture Hall of SESSION II)			
* _ online talk					

\* – online talk

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### Mathematical Institute of the Serbian Academy of Sciences and Arts (MISANU)

Knez Mihailova Street 36

Friday: SESSION – II (MATH. INST: LECTURE HALL 102 at 1st floor)					
14:00 - 14:35	35'	Andrei KHRENNIKOV*	Ultrametrics, dendrograms, quantum potential and medical diagnostics of neurological diseases		
14:35 – 15:10	35'	Farukh MUKHAMEDOV*	p-Adic countable state SOS model		
15:10 – 15:45	35'	Mukadas MISSAROV*	Fixed points of the renormalization group transformation in a generalized fermionic hierarchical model		
15:45 – 16:15	30'	Coffee Break			
16:15 – 16:50	35'	Trond DIGERNES*	Non-Archimedean Test Function Spaces: A Discussion		
16:50 – 17:25	35'	David WEISBART*	Brownian Motion in the p-Adic Integers is a Limit of Discrete Time Random Walks		
17:25 – 17:35	10'	CLOSING			

\* – online talk