

## DECT 2021 Schedule

Monday, September 27 <sup>th</sup>		
15:00 – 15:10	Welcome words from G. Zholtkevych, Dean of the School of Mathematics and Informatics of V. N. Karazin Kharkiv National University	
15:10 – 15:40	G. Sklyar	Valery Ivanovich Korobov. Our collaboration and selected results
15:40 – 16:05	Nguyen Khoa Son	On absolute stability of a class of time-varying switched nonlinear systems with delay
16:05 – 16:30	R. Rabah	On our work with V. I. Korobov in Kharkov and its further continuation in subsequent years
16:30 – 16:55	A. Zuyev	Control of a flexible beam with attached mass: analytic and data-driven approaches
16:55 – 17:20	J. Wozniak	Prof. Valerii Ivanovich Korobov's work in Szczecin, Poland
Tuesday, September 28 <sup>th</sup> Morning offline session. Chairman: J. Wozniak		
10:00 – 10:20	S. Ignatovich, K. Sklyar	Linearizability problem and invariants of linear control systems with analytic matrices
10:20 – 10:40	L. Fardigola, K. Khalina	On controllability problems for the heat equation with variable coefficients on a half-axis
10:40 – 11:00	T. Revina, V. Korobov	The feedback synthesis for motion of a mass on an ideal spring
11:00 – 11:20	V. Marchenko, P. Polak, G. Sklyar	Asymptotic analysis of classes of $C_0$ -groups with generators having non-basis family of eigenvectors
11:20 – 11:40	B. Wasilewski, P. Polak, G. Sklyar	On the extension of Batty's theorem on semigroup asymptotic stability
<i>Break for lunch</i>		
Tuesday, September 28 <sup>th</sup> Afternoon offline session. Chairman: L. Fardigola		
14:00 – 14:20	Yu. Romashov, S. Alyokhina, I. Nevliudov	Controllability problems for wheeled electromechanical robotic platforms taking into account motion's smoothness restrictions

14:20 – 14:40	S. Chuiko	Smoothness conditions for a pseudoinverse matrix
14:40 – 15:00	A. Goncharuk, S. Gefter	Linear differential equations in the ring of formal power series
15:00 – 15:20	A. Piven', S. Gefter	Linear differential equations in the module of copolynomials
15:20 – 15:40	M. Bebiya	On stabilizability and controllability of triangular systems in the singular case
<p>Wednesday, September 29<sup>th</sup></p> <p>Morning online session. Chairman: P. Polak</p>		
10:00 – 10:20	A. Kholkin	Operator-Theoretic Proof of Arnold's Theorems of Alternation and Non-oscillation for Differential Equations of Even Order with Operator Coefficients
10:20 – 10:40	Pham Minh Huy Huynh	Pullback and forward dynamics of nonautonomous difference equations: Basic constructions
10:40 – 11:00	S. Chuiko, Ya. Kalinichenko	Linear Noetherian difference-algebraic boundary value problems
11:00 – 11:20	D. Andreeva, S. Ignatovich	Homogeneous approximations for control systems with output
11:20 – 11:40	P. Mormul	Kumpera-Ruiz algebras and related issues (21 years after a Trieste 2000 conference)
<p><i>Break for lunch</i></p>		
<p>Wednesday, September 29<sup>th</sup></p> <p>Afternoon online session. Chairman: V. Marchenko</p>		
14:00 – 14:20	Yu. Dyukarev	The first and second kind matrix polynomials associated with the matrix Hamburger moment problem
14:20 – 14:40	Ye. Yevgenieva	Uniqueness of large solutions of semilinear elliptic equations with degenerate absorption
14:40 – 15:00	I. Dmytryshyn	Construction of invariant relations in the problem of estimating the speed of oscillations of oscillatory networks on incomplete information
15:00 – 15:20	N. Kizilova, D. Kulik	Big Data analysis and mathematical modeling of Covid-19