3rd International conference

DIFFERENTIAL EQUATIONS and CONTROL THEORY (DECT-2018)

September 25-27, Kharkov, Ukraine
Karazin Kharkiv National University, Svoboda square, 4, room 6-52

Monday, September 24	
15.00-18.00	Registration
18.00-19.00	Welcome Reception

Tuesday, September 25		
09.00-10.00	Registration	
10.00-10.10	Opening ceremony	
Morning session, chairman Sklyar G.		
10.10-10.30	Korobov V.	*Mathematics in Kharkov*
10.30-11.10	Jakubczyk B.	*Optimization problems with oscillating controls*
11.10-11.30	Coffee break	
11.30-12.10	Klamka J.	*Stochastic Controllability of Fractional Linear Systems*
12.10-12.30	Ignatovich S.	*Feedback linearizability in the class C^l*
12.30-12.50	Shepelsky D.	*The integrable nonlocal nonlinear Schrodinger equation: Riemann-Hilbert approach and long-time asymptotics*
12.50-14.30	Lunch	
Afternoon session, chairman Korobov V.		
14.30-14.50	Mormul P.	*Weakly and strongly nilpotent control systems. Examples among the Goursat flags*
14.50-15.10	Ignatyev A.	*On the Stability of Invariant Sets of Functional Differential Equations with Delay*
15.10-15.30	Dyukarev Yu.	*The Stieltjes matrix moment problem and associated positive symmetric operators*
15.30-15.50	Coffee break	
15.50-16.10	Zolotarev V.	*Inverse spectral problem for the operators with non-local potential*
16.10-16.30	Kholkin A.	*Spectral properties of a non-selfadjoint differential operator with block-triangular operator coefficients*
16.30-16.50	Zholtkevych G.	*Category-theoretic Methods for Studying Causality in Distributed Systems*
17.30	Sightseeing tour around Kharkiv	

Wednesday, September 26		
Morning session, chairman Jakubczyk B.		
10.00-10.40	Rabah R.	*On exact controllability and complete stabilizability of linear systems in Hilbert spaces*
10.40-11.20	Korbicz J.	*Cell nuclei detection for computerized cancer diagnosis based on stochastic geometry and deep learning*
11.20-11.40	Coffee break	
11.40-12.00	Fardigola L.	*Controllability problems for the heat equation on a half-axis*
12.00-12.20	Rezounenko A.	*Solutions to nonlinear systems of reaction-diffusion equations/ODEs with delay*
12.20-12.40	Chuiko S.	*Constructive methods of investigation of the differential-algebraic Cauchy problem*
12.40-13.00	Chuiko S.	*Constructive methods of investigation of the differential-algebraic Cauchy problem with degenerate pulse action*
13.00-14.30	Lunch	
Afternoon session, chairman Zhitomirskii M.		
14.30-14.50	Szkibiel G.	*Control and stabilizability of rotating Timoshenko beam with the aid of the torque*
14.50-15.10	Polak P.	*On asymptotic growth of solutions of C_0 semigroups*
15.10-15.30	Firkowski M.	*Asymptotic analysis and optimal decay ratio of damped slowly rotating Timoshenko beams*
15.30-15.50	Coffee break	
15.50-16.10	Romashov Yu.	*Application of the method of lines to discretize problems of controllability for the partial differential equations, representing processes in power installations*
16.10-16.30	Kizilova N.	*Nano thermo-hydrodynamics models for quantitative estimations of the cell membrane fluidity: a review*
16.30-16.50	Kizilova N.	*On bioheat equation and its modifications*
16.50-17.10	Piven' A.	*Linear operator-differential equation with generalized quasi-polynomial on the right-hand side*
18.00	Conference dinner	

Thursday, September 27		
Morning session, chairman Rabah R.		
10.00-10.40	Zhitomirskii M.	*Affine varieties in the tangent bundle*
10.40-11.00	Misztela A.	*Remarks on lower semicontinuous solutions of Hamilton-Jacobi-Bellman equations*
11.00-11.20	Revina T.	*Feedback synthesis for motion of a material point with allowance for friction*
11.20-11.40	Coffee break	
11.40-12.00	Marchenko V.	*Resolvent for certain classes of generators of C_0-groups*
12.00-12.20	Bebiya M.	*On synthesis problem for inherently nonlinear systems*
12.20-12.40	Hukalov O.	*Approximate solutions of the Boltzmann equation with infinitely many modes*
12.40-13.00	Novikova Yu.	*Stabilization of a nonlinear system with elastic plates*
13.00-14.30	Lunch	
Afternoon session, chairman Korbicz J.		
14.30-14.40	Sysoev D.	*Seminonlinear matrix boundary-value problem*
14.40-14.50	Dmytryshyn I.	*The synchronization of the angular velocities of identical rigid bodies*
14.50-15.00	Karieva V.	*Representation of the organs' and tissues' regeneration processes as a solution of some optimal control problems the criteria and methods of which are derived from the biological principles of evolutionary developmental biology*
15.00-15.10	Sukhinina Yu.	*One optimal control problem for an unmanned aerial vehicle*
15.10-15.20	Andreieva D.	*One problem of a control system design in the class C^l*
15.10-15.30	Solodova T.	*Controllability of second-order partial differential equations in time*
15.30-15.40	Solovyova E.	*Mathematical modeling of the bioactive arterial wall*
15.40-16.00	Coffee break	
16.00-16.10	Chuiko V.	*Stopping of oscillations of controlled elliptic pendulum*
16.20-16.30	Khalin A.	*On numerical modeling of the river flows with validation on the measurement data*
16.30-16.40	Khalin A.	*Trajectory optimization for underwater gliders*
16.40-16.50	Tkachenko Y.	*Nanofluidic flows in the tubes and minimum entropy generation principle*
16.50-17.00	Averianova N.	*One method of mapping nonlinear systems to linear*
17.00-17.10	Derevianko A.	*Stability analysis of particular random switched linear dynamical system*
17.10	Closing ceremony	