

International conference

# Dynamical Systems and Their Applications

Kyiv, Ukraine, 22-26 June, 2015

**Monday, 22 June**

**16:00-19:00 Registration**

**Tuesday, 23 June**

**9:00-10:00 Registration**

**10:00-10:15 Conference Opening**

**10:15-10:55** Anatole Katok *Flexibility of entropies and Lyapunov exponents*

**Coffeebreak**

**11:20-12:00** Valery Gaiko *On limit cycle bifurcations*

**12:05-12:25** Alexey Teplinsky *A smoothly linearizable circle diffeomorphism with breaks*

**12:30-13:05** Svetlana Katok *Reduction theory, coding of geodesics, and continued fractions*

**Lunch**

**15:00-15:40** Grygorii Torbin *Fractals, singular probability measures, and dynamical systems*

**15:40-16:00** Volodymyr Koshmanenko *On dynamical system of conflict with fair redistribution of vital resources*

**16:00-16:20** Inga Verygina *Comparison of two strategies in the problem of “conquest” of territory*

**Coffeebreak**

**16:40-17:00** Roderick Melnik *Dynamical systems approach for multidimensional phase transformation models and their applications*

**17:00-17:20** Vasyl Slyusarchuk *Nonlinear almost periodic difference equations*

**17:20-17:40** Olena Romanenko, Oleksandr Sharkovsky *Difference equations and infinite-dimensional dynamical systems*

**18:00 Welcome party**

## Wednesday, 24 June

**10:00-10:40** Rostislav Grigorchuk *Absolutely non free actions, random subgroups, and factor representations*

### Coffeebreak

**11:00-11:40** Francisco Balibrea *Dynamics of the Thue-Morse system of difference equations*

**11:45-12:05** Irina Nizhnik *Deterministic diffusion*

**12:10-12:30** Olena Karpel *Infinite orbit equivalence class for a minimal substitution dynamical system*

**12:35-13:05** M Howard Lee *Solving for the fixed points of 3-cycle in the logistic map and toward realizing chaos by the theorem of Sharkovskii*

### Lunch

**15:00-15:40** Mykola Pratsiovytyi *Topologically-metrical and fractal analysis of local structure of continuous functions*

**15:40-16:00** Olexandr Karpenko *Probability measures and dynamical systems generated by continuous nowhere monotonic functions*

**16:00-16:20** Xiaoyan Liu *Numerical methods for solving systems of nonlinear Volterra integral equations with cardinal splines*

### Coffeebreak

**16:40-17:00** Alexander Makarenko *Systems with memory, nonlocality and anticipation. Some new examples and new research problems*

**17:00-17:20** Tetyana Revina *Robust feedback synthesis for a disturbed canonical system*

**17:20-17:40** Vitalii Marchenko *One special construction in the spectral theory of  $C_0$ -semigroups*

**17:40-18:00** Roman Nikiforov *On phenomena connected with infinite linear IFS*

## Thursday, 25 June

**10:00-10:40** Oleksandr Sharkovsky  *$\omega$ -Attractors and their basins*

### Coffeebreak

**11:00-11:40** Andriy Sivak  *$\sigma$ -Attractors,  $\mu$ -attractors, and their basins*

**11:45-12:05** Makar Plakhotnyk *Topologically conjugated unimodal interval maps*

**12:10-12:30** Oleksandr Rybak *Sensitivity of the induced systems on an interval*

**12:35-12:55** Abdyvali Akbergenov *On a Class of differential-functional equations*

### Lunch

**15:00-15:40** Igor Vlasenko *New invariants of topological conjugacy of non-invertible inner mappings*

**15:40-16:00** Tetiana Rybalkina *The pairs of linear mappings up to topological equivalence*

**16:00-16:20** Mykhailo Kuznietsov *Analogue of topological entropy for some infinite-dimensional systems*

### Coffeebreak

**16:40-17:00** Mikola Bilotskyy *Application (c)-properties for Cesare summability methods  $(C, 1)$  of ergodic theorem*

**17:00-17:20** Olurotimi Ojoniyi *Studies on chaos and hyperchaos in four-dimensional Sprott systems*

**17:20-17:40** Vladimir Savchin *On potentiality of some evolutionary systems with deviating arguments*

**17:40-18:00** Victor Urmanchev *Four dimensional and singular perturbation systems of differential equations and two dimensional dynamical system with impulse*

## Friday, 26 June

**10:00-10:20** Natalya Vasylenko *One-dimensional dynamical system generated by one continuous twisted function*

**10:20-10:40** Irina Garko *On fractal properties of probability measures with independent  $x - Q_\infty$ -digits*

**10:45-11:05** Marina Lupain *On DP-approach to fractal properties of random variables with independent identically distributed LML-symbols*

**11:05-11:25** Lilia Sinelnyk *On singularity of distribution of random variables with independent symbols of Oppenheim expansions*

### Coffeebreak

**11:45-12:05** Natalya Kizilova *A novel model for explanation the regular and chaotic dynamics in arterial blood flow*

**12:05-12:25** Victoria Voloshyna *About purity of distribution for special class of random variables in  $\mathbb{R}^2$*

**12:30-12:50** Olena Smiiian *On some open problems of faithful covering family of cylinders generated by the  $Q_\infty$ -expansion*

**12:55-13:15** Oleksandr Slutskyi *About the faithfulness of Cantor series expansion cylinders family with respect to the packing dimension*

**13:15-13:35** Vladislav Reva *Forced rotation of a ferromagnetic fine particle in a viscous carrier: the stationary probability density*

### Conference Closing