

International Workshop on the Qualitative Theory of Differential Equations
QUALITDE – 2015
December 27 – 29, 2015
Tbilisi, Georgia

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6 Tamarashvili Str., Room # 612, Tbilisi 0177, Georgia*

P r o g r a m

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| 10:45 – 11:00 | Opening of the Workshop |
| 11:00 – 11:30 | I. Kiguradze – On Boundary Value Problems with the Condition at Infinity for Systems of Higher Order Nonlinear Differential Equations |
| 11:30 – 12:00 | T. Tadumadze, A. Nachaoui – On the Representations of Sensitivity Coefficients for Nonlinear Delay Functional Differential Equations with the Discontinuous Initial Condition |
| 12:00 – 12:30 | S. Kharibegashvili – On One Boundary Value Problem for Semilinear Equation with the Iterated Multidimensional Wave Operator in the Principal Part |
| 12:30 – 13:00 | T. Jangveladze – Investigation and Approximate Resolution of One Nonlinear Integro-Differential Parabolic Equation |
| 13:00 – 13:30 | Z. Kiguradze – On One Two-Dimensional Nonlinear Integro-Differential Equation |
| 13:30 – 14:00 | Coffee Break |
| 14:00 – 16:00 | Overview of the talks of participants in absentia
R. Agarwal, D. O'Regan, S. Hristova – Stability and Caputo Fractional Dini Derivative of Lyapunov Functions for Caputo Fractional Differential Equations
E. A. Barabanov, A. S. Vaidzelevich – On the Structure of Upper Frequency Spectra of Linear Differential Equations
A. K. Demenchuk – The Control Problem of Asynchronous Spectrum of Linear Systems with Depended Blocks of Complete Column Rank
N. A. Izobov, A. V. Il'in – The Infinite Version of Perron's Effect of Value Change in Characteristic Exponents in the Neighbourhood of Integer Points
N. A. Izobov, S. A. Mazanik – On Limit Irreducibility Sets of Linear Differential Systems
M. V. Karpuk – A Complete Description of the Largest Lyapunov Exponent of Linear Differential Systems with Parameter-Multiplier as Function of Parameter |

E. K. Makarov – On Integral Conditions Determining some \tilde{A} -Ultimate Classes of Perturbations

M. Perestyuk, P. Feketa – Stability of Trivial Invariant Torus of Dynamical System

M. Perestyuk, O. Kapustyan, I. Romanjuk – Global Attractors for Some Class of Discontinuous Dynamical Systems

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11:00 – 11:30 **M. Ashordia** – On the Well-Possedness of the Cauchy Problem and the Lyapunov Stability for Systems of Generalized Ordinary Differential Equations

11:30 – 12:00 **O. Jokhadze** – Periodic Problem for the Nonlinear Telegraph Equation

12:00 – 12:30 **G. Berikelashvili** – Convergence Analysis of Difference Schemes for Generalized Benjamin-Bona-Mahony-Burgers Equation

12:30 – 13:00 **N. Partsvania** – The Nonlinear Kneser Problem for Singular in Phase Variables Two-Dimensional Differential Systems

13:00 – 13:30 **I. Kiguradze, Z. Sokhadze** – On One Boundary Value Problem with the Condition at Infinity, Arising in the Oscillation Theory

13:30 – 14:00 **Coffee Break**

14:00 – 16:00 **Overview of the talks of participants in absentia**

A. N. Bondarev – Multipoint Boundary Value Problem for the Linear Matrix Lyapunov Equation with Parameter

E. Bravyi – On the Existence of Positive Periodic Solutions to Second Order Linear Functional Differential Equations

A. Domoshnitsky, R. Hakl, B. Půža – Multi-Point Boundary Value Problems for Functional Differential Equations

A. Lomtadze, J. Šremr – Sign-Constant Periodic Solutions to Second-Order Differential Equations with a Sub-Linear Non-Linearity

I. Rachůnková – How to Construct Solutions of State-Dependent Impulsive Boundary Value Problems

T. Shovcoplyas – On the Solvability of One Class of Boundary Value Problems

J. Šremr – On Conjugacy of Second-Order Half-Linear Differential Equations on the Real Axis

S. Staněk – Leray-Schauder Degree Method in Periodic Problem for the Generalized Basset Fractional Differential Equation

A. N. Stanzhytskyi, A. O. Tsukanova – On Solution of the Initial Value Problem for One Neutral Stochastic Differential Equation of Reaction-Diffusion Type in Hilbert Space

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11:00 – 13:00

Overview of the talks of participants in absentia

G. Agranovich, E. Litsyn, A. Slavova – Travelling Wave Solutions of Integro-Differential Equation Arising in Nano-Structures

I. Astashova – On Asymptotic Behavior of Solutions to Nonlinear Differential Equations with a Small Right-Hand Side

J. Baoguo – Kiguradze-type and Belohorec-type Oscillation Theorems for Second Order Nonlinear Dynamic Equations on Time Scales

R. I. Kadiev, A. Ponosov – Stability of Linear Stochastic Difference Equations with Delay

T. Kusano, J. V. Manojlovic – Precise Asymptotic Behavior of Regularly Varying Solutions of Second Order Half-Linear Differential Equations

V. P. Maksimov – An Optimal Control Problem for a Class of Functional Differential Equations with Continuous and Discrete Times

S. A. Shchogolev – On the Existence of a Special Type Integral Manifold of a Quasilinear Differential System

P. M. Simonov – To a Question on the Stability of Linear Hybrid Functional Differential Systems with Aftereffect

T. Tanigawa – Asymptotic Behavior of Positive Solutions of Second Order Half-Linear Differential Equations with Deviating Arguments of Mixed Type

13:00 – 13:30

Coffee Break

13:30 – 15:30

Overview of the talks of participants in absentia

M. O. Bilozerova – Asymptotic Behavior of Solutions with Slowly Varying Derivatives of Essentially Nonlinear Second Order Differential Equations

O. O. Chepok – The Asymptotic Properties of Rapidly Varying Solutions of Second Order Differential Equations with Regularly and Rapidly Varying Nonlinearities

A. G. Doroshenko – Asymptotic Representation of Solutions of n -th Order Ordinary Differential Equations with Regularly Varying Nonlinearities

V. M. Evtukhov, A. G. Chernikova – Asymptotic Representations of Solutions of Second-Order Differential Equations with Rapidly Varying Nonlinearities

L. Koltsova – The Existence and the Asymptotic Behavior (as $t \rightarrow +\infty$) of Unboundedly Continuable to the Right Solutions of the Ordinary Differential Equation of the Second Order

K. S. Korepanova – Asymptotic Representations of Solutions of Differential Equations with Regularly Varying Nonlinearities

Z. Opluštil – Oscillation Criteria for Certain System of Non-Linear Ordinary Differential Equations

O. S. Vladova – On Asymptotics of Solutions for Sufficiently Non-Linear Differential Equations of the Second Order