

---

# *Czech-Israeli Workshop on Functional Differential Equations: Theory and Applications*

June 19-25, 2017, Brno, Czech Republic

## PROGRAM

### Tuesday, June 20

9:00 – 9:40

**Guy Landsman**

*Sign-constancy of Green functions in impulsive boundary value problems*

9:50 – 10:10

**Roman Yavich**

*About model of transport flow*

10:20 – 10:40

Coffee break

10:40 – 11:20

**Oleg Kuperwasser**

*Autopilot to maintain movement of a drone in a vertical plane at a constant height*

11:30 – 13:00

Lunch

13:00 – 13:40

**Ben Zion Shklyar**

*Optimization of combined leukemia therapy by finite-dimensional controls*

13:50 – 14:30

**András Rontó**

*On a weighted Cauchy problem*

## Wednesday, June 21

- 9:00 – 9:40      **Leonid Berezansky**  
*Stability tests for linear neutral differential equations: review and new results*
- 9:50 – 10:10    **Olga Pinhasov**  
*Model of testosterone regulation*
- 10:20 – 10:40    Coffee break
- 10:40 – 11:20    **Dan Gamliel**  
*Quasi-steady state in an impulsive delay differential equation*
- 11:30 – 13:00    Lunch
- 13:00 – 13:40    **Alexander Domoshnitsky**  
*Stabilization of motion by delay feedback control*
- 13:50 – 14:30    **Ido Halperin**  
*Formulation of Krotov functions for a type of constrained bilinear quadratic regulator problem*
- 14:40 – 15:00    Coffee break
- 15:00 – 15:40    **Jiří Šremr**  
*Hyperbolic functional differential equations with a Carathéodory right-hand side in the framework of abstract functional differential equations*

## Thursday, June 22

- 10:00 – 10:40    **Yuri Ribakov**  
*Applying constrained bilinear quadratic regulator for optimal control of structures using semi-active dampers*
- 10:50 – 11:30    **Irena Rachůnková**  
*Impulsive problems and distributional differential equations*
- 11:40 – 13:10    Lunch

- 13:10 – 13:50      **Arcady Beriozkin**  
*Developing a universal predictive operator for description of capillary hysteresis in porous media*
- 14:00 – 14:40      **Jan Tomeček**  
*On the Dirichlet problem in one-dimensional billiard space*
- 14:50 – 15:10      Coffee break
- 15:10 – 15:50      **Alexander Lomtadze**  
*Neumann boundary value problem for second-order linear ordinary differential equations*

**Friday, June 23**

- 11:30 – 12:10      **Svatoslav Staněk**  
*Solvability of fractional boundary value problems at resonance via method of fractional initial value problems*
- 12:20 – 13:50      Lunch
- 13:50 – 14:10      **Vladimir Raichik**  
*Sturm separation theorem for impulsive equations*
- 14:20 – 14:40      **Jana Burkotová**  
*Nonlinear initial value problems with  $\phi$ -Laplacian and a time singularity*
- 14:50 – 15:30      **Robert Hakl**  
*Periodic solutions to second-order ordinary differential equations with phase singularities*

**Sunday, June 25**

- 14:00 – 17:00      **Interactive session**  
*Open problems, further research, discussion*