

## 9th International ISAAC Congress Session 21

August 5--9, 2013, Krakow, Poland.

**Session:** Differential and Difference Equations with Applications

**Organisers:** L. Berezansky (Beer-Sheva), J. Diblik (Brno), A. Zafer (Kuwait), M. Zima (Rzeszow)

### Talks:

1. Asymptotic approximations of a thin elastic beam with Robin condition  
Bare, Zoufine - Fraunhofer, Kaiserslautern, Germany, email: [bare@itwm.fhg.de](mailto:bare@itwm.fhg.de)  
Orlik, Julia - Fraunhofer, Kaiserslautern, Germany, email: [orlik@itwm.fhg.de](mailto:orlik@itwm.fhg.de)  
Panassenko, Grigory, Saint-Etienne, France, email: [grigory.panassenko@univ-st-etienne.fr](mailto:grigory.panassenko@univ-st-etienne.fr)
2. *Compulsory behavior of solutions of dynamic equations on time scales*  
Josef Diblik, Brno, Czech Republic, [diblik.j@fce.vutbr.cz](mailto:diblik.j@fce.vutbr.cz), [diblik@feec.vutbr.cz](mailto:diblik@feec.vutbr.cz)
3. **Boundary value problems with state-dependent impulses\*\*\***  
**Irena Rachunkova\*\*\***, Olomouc, Czech Republic, email: [irena.rachunkova@upol.cz](mailto:irena.rachunkova@upol.cz)  
Jan Tomecek, Olomouc, Czech Republic, email: [jan.tomecek@upol.cz](mailto:jan.tomecek@upol.cz)
4. Computability of Solution Operators of Boundary-value Problems for Symmetric Hyperbolic Systems of PDEs  
Victor Selivanov - A.P. Ershov, Institute of Informatics Systems, email: [vseliv@iis.nsk.su](mailto:vseliv@iis.nsk.su)  
Svetlana Selivanova - S.L. Sobolev Institute of Mathematics, email: [s\\_seliv@math.nsc.ru](mailto:s_seliv@math.nsc.ru)
5. Extinction and positivity for the evolution p-Laplacian equations with absorption on networks  
Soon-Yeong Chung, Seoul, South Korea, email: [sychung@sogang.ac.kr](mailto:sychung@sogang.ac.kr)
6. Applications of the method of dynamic programming to inverse problems of dynamics  
Timofey B. Tokmantsev N.N. Ural Federal University, email: [tokmantsev@imm.uran.ru](mailto:tokmantsev@imm.uran.ru)
7. Generalized linear differential equations in a Banach space: Continuous dependence on a parameter  
Milan Tvrdy, Prague, Czech Republic; email: [tvrdy@math.cas.cz](mailto:tvrdy@math.cas.cz)  
Giselle A. Monteiro, Prague, Czech Republic; email: [giantunesmonteiro@gmail.com](mailto:giantunesmonteiro@gmail.com)
8. Geometrical features of the soliton solution  
Zhanat Zhunussova, Almaty, Kazakhstan, email: [zhzhkh@mail.ru](mailto:zhzhkh@mail.ru)
9. Second-order periodic boundary value problem at resonance  
Mirosława Zima, Rzeszow, Poland, email: [mzima@univ.rzeszow.pl](mailto:mzima@univ.rzeszow.pl)
10. Discrete singular integrals in a half-space  
Alexander V. Vasilyev, Belgorod, Russia, email: [alexvassel@gmail.com](mailto:alexvassel@gmail.com)  
Vladimir B. Vasilyev, Lipetsk, Russia, email: [vladimir.b.vasilyev@gmail.com](mailto:vladimir.b.vasilyev@gmail.com)
11. On the Solution of a Mixed-Type Differential Difference Equation  
Valentina Iakovleva, Caracas, Venezuela, email: [romanova@usb.ve](mailto:romanova@usb.ve)  
Judith Vanegas, Caracas - Venezuela, email: [cvanegas@usb.ve](mailto:cvanegas@usb.ve)

12. On spectral problem and positive solutions of a functional differential equation  
Sergey Labovskiy, Moscow, Russia, email: [labovski@gmail.com](mailto:labovski@gmail.com)
13. On the position of a chaotic solution close to a homoclinic orbit  
Michal Pospisil, Brno, Czech Republic, email: [pospisilm@feec.vutbr.cz](mailto:pospisilm@feec.vutbr.cz)
14. Existence of a positive solution of discrete equations of  $(k+1)$ st order  
Jaromir Bastinec, Brno, Czech Republic, email: [bastinec@feec.vutbr.cz](mailto:bastinec@feec.vutbr.cz)  
Josef Diblik, Brno, Czech Republic, email: [diblik.j@fce.vutbr.cz](mailto:diblik.j@fce.vutbr.cz), [diblik@feec.vutbr.cz](mailto:diblik@feec.vutbr.cz)
15. Stability of linear periodic Hamiltonian systems on time scales  
Agacik Zafer, Egaila, Kuwait, email: [agacik.zafer@aum.edu.kw](mailto:agacik.zafer@aum.edu.kw)
16. On Hardy inequality for disfocality and disconjugacy of half-linear differential equations of second order  
Ryskul Oinarov, Astana, Kazakhstan, email: [o\\_ryskul@mail.ru](mailto:o_ryskul@mail.ru),  
Saltanat Kudabaeva, Astana, Kazakhstan, email: [rakhimova.salta@mail.ru](mailto:rakhimova.salta@mail.ru)  
Akбота Abylayeva, Astana, Kazakhstan, email: [abylayeva\\_b@mail.ru](mailto:abylayeva_b@mail.ru)
17. On asymptotic properties of a general nonlinear delay differential equation  
Leonid Berezansky, Negev, Israil, email: [brznsky@cs.bgu.ac.il](mailto:brznsky@cs.bgu.ac.il)
18. The Wintner-Perko termination principle and new bifurcational geometric methods for the global qualitative analysis of polynomial dynamical systems  
Valery Gaiko, Minsk, Belarus, email: [valery.gaiko@gmail.com](mailto:valery.gaiko@gmail.com)

\*\*\*Plenary Talk