



*The Institute of Mathematics Technical University of Łódź, Łódź, Poland,*

*The Institute of Mathematics University of Białystok, Białystok, Poland,*

*and*

*Juliusz Schauder University Centre for Nonlinear Studies, Toruń, Poland*

are organizing a conference

## **"Dynamical Systems and Applications II"**

Łódź, Poland, June 12, 2014

This conference is a sequel of "Dynamical Systems and Applications " held in honor of Prof. Avner Friedman at the Institute of Mathematics, Lodz University of Technology, on May 7, 2013. The present conference will concern major trends in the theory of nonlinear equations dynamical systems. Young scientists and Ph.D. students are invited to participate in Poster Session.

Conference will cover two thematic sessions

- **"Boundary value problems and applied variational methods"** organized by Marek Galewski [marek.galewski@p.lodz.pl](mailto:marek.galewski@p.lodz.pl) and Anna Ochal [anna.ochal@uj.edu.pl](mailto:anna.ochal@uj.edu.pl);
- **"Nonlinear equations"** organized by Marek Galewski, [marek.galewski@p.lodz.pl](mailto:marek.galewski@p.lodz.pl) and Ewa Schmeidel, [eschmeidel@math.uwb.edu.pl](mailto:eschmeidel@math.uwb.edu.pl)

For registration please write to the suitable session organizer to the address provided or directly to prof. Marek Galewski [marek.galewski@p.lodz.pl](mailto:marek.galewski@p.lodz.pl)

### **Organizing Committee**

- Marek Galewski, chair
- Bogdan Przeradzki
- Ewa Schmeidel
- Elżbieta Galewska
- Joanna Zwierzchowska
- Katarzyna Szymańska-Dębowska – poster session
- Renata Wieteska, Robert Jankowski, Joanna Zonenberg – secretaries

### **Scientific Committee**

- Wojciech Kryszewski (Nicolaus Copernicus University, Toruń, Poland) - chair
- Josef Diblík (Brno University of Technology, Czech Republic)
- Andrzej Nowakowski (University of Lodz, Poland)
- Giovanni Molica Bisci (University of Reggio di Calabria, Italy)
- Urszula Ledzewicz (Southern Illinois University Edwardsville, USA)
- Małgorzata Migda (Poznan University of Technology, Poland)
- Stanisław Migórski (Jagiellonian University, Krakow, Poland)
- Miroslava Růžičková (Zilina University, Slovakia)

### **Tentative Schedule**

#### **9.10 – opening (F2)**

9.15-9.45 opening lecture by prof. W. Kryszewski

9.45-10.05 Dariusz Idczak „Existence of optimal solutions to Lagrange problem for a Roesser system”

#### **10.05-10.15 break**

#### **10.15-11.00 SESSION talks (F4)**

10.15-10.25 Renata Wieteska „On the dependence on parameters for second order discrete boundary value problem with the  $p(k)$ -Laplacian”

10.25-10.35 Robert Jankowski „New Oscillation Criteria for Second Order Neutral Difference Equations”

10.35-10.45 Piotr Kowalski „The existence of a solution for Dirichlet boundary value problem for a Duffing type differential inclusion”

10.45-10.55 Sebastian Ruzskowski „Structure of the solution set to differential inclusions with impulses at variable times”

11.00-11.20 Małgorzata Migda

#### **11.20-12.00 Poster Session and Coffee Break (52)**

#### **12.00-13.00 SESSIONS (F4)**

12.00-12.20 Bogdan Przeradzki “Model epidemii grypy”

12.20-12.25 *Break*

12.25-12.45 Anna Ochal „Existence results for variational-hemivariational inequalities with applications”

12.45-13.05 Piotr Kalita „On large time asymptotics for two classes of contact problems”

13.05-13.15 Justyna Ogorzały „Dynamic frictional contact problem with long memory for elastic-viscoplastic materials”

#### **13.15-14.20 Lunch**

#### **14.20-16.00 SESSIONS (F4)**

14.20-14.30 Paweł Szafraniec „Thermal problems in contact mechanics”

14.30-14.40 Tomasz Janiczko „2-D Navier-Stokes flow with subdifferential friction condition”

14.40-14.50 Jiangfeng Han „Analysis of an adhesive frictional contact problem for viscoelastic materials with long memory”

14.50-15.00 Tomasz Służalec „Computational Method for Contact Model of Two Gao Beams”

15.00-15.15 *Break*

15.15-15.35 Andrzej Nowakowski „Approximation of Value Function by  $\varepsilon$ -Dynamic Programming in Hilbert space”

15.35-16.00 Urszula Ledzewicz „The Method of Characteristics Applied to Models for Cancer Chemotherapy”

## **16.00-farewell party and poster session**

### **Poster Session**

Participants interested in presenting their results in a form of a poster should refer to dr Katarzyna Szymańska-Dębowska, e-mail: [katarzyna.szymanska-debowska@p.lodz.pl](mailto:katarzyna.szymanska-debowska@p.lodz.pl), the Poster Session Organizer.

### **Conference place**

Conference will be held at the Institute of Mathematics  
Technical University of Lodz, Lodz Wolczanska 215  
Building B9, “LODEX”, Campus B

### **Social activities and accommodation**

We will offer lunch, coffee break and farewell party.

The organizers may help you in finding suitable accommodation in Lodz. Please do not hesitate to write to us with accommodation requests.

### **Conference Proceedings**

Original contributions presented at the conference will be considered for publication in the journal: Journal of Applied Analysis

### **Conference fee - 70 zł**

This will include modest conference materials, coffee break, lunch and farewell party.

Young scientist may apply to a reduced fee of 30 zł. Ph.D. students may register for free - in this case we cannot provide conference lunch. All other social activities will be open for them.

The conference fee should be directed to the following bank account:

Technical University of Lodz

Faculty of Technical Physics, Applied Mathematics and Computer Science

**23 1240 3028 1111 0010 3742 1516**

With additional note “DSA, Name and Family Name of Participant”

Payment must be made by participants employers when confirmation will be required.