WORKSHOP PROGRAM

Workshop on Applications of Modern Mathematics and Mechanics 2015

February 2nd – 6th, 2015
Faculty of Science, UP Olomouc
Room 5.006

MONDAY, FEBRUARY 2nd, 2015

10.00 – 13.00   Registration

13.00 – 13.15   Opening

Chairman: Prof. Jan Andres

13.15 – 14.00   Prof. Jean MAWHIN - Multiple Solutions for Nonlinear

Systems with some Symmetries 1

14.15 – 15.00   Prof. Celso GREBOGI - Compressive Sensing Based

Prediction

15.00 – 15.30   Coffee break

Chairman: Prof. Mircea T. Sofonea

15.30 – 16.15   Prof. David GAO - On the Analytical Solutions to General

Nonconvex Variational Boundary Value Problems

16.30 – 17.15   Prof. Stanisław MIGÓRSKI - Evolution Inclusions,

Hemivariational Inequalities and Applications to Contact

Mechanics

18.00   Social evening with dinner

Streamlining the Mathematics Studies at the Faculty of Science of PalackyUniversity in Olomouc

Registry number: CZ.1.07/2.2.00/28.0141

TUESDAY, FEBRUARY 3rd, 2015

Chairman: Prof. Jaroslav Haslinger

09.00 – 09.45   Prof. Ewa WEINMÜLLER - Solving Singular BVPs from Applications Using Collocation Based Software

10.00 – 10.45   Prof. Akhtar KHAN - Parameter Identification in Some Variational Problem

10.45 – 11.15   Coffee break

11.15 – 12.00   Prof. Patrizio NEFF - Nonlinear Elasticity, Geodesics on GL^3 and Logarithmic Strain Measures

12.00 – 13.15   Lunch break

Chairman: Prof. Alexander Domoshnitsky

13.15 – 14.00   Doc. Radek KUČERA - The R-linear Convergence Rate of an Algorithm Arising from the Semi-Smooth Newton Method Applied to 2D Contact Problems with Friction

14.15 – 15.00   Doc. Pavel ŘEHÁK - Half Linear Differential Equations

15.00 – 15.30   Coffee break

Chairman: Prof. Irena Rachůnková

15.30 – 16.15   Prof. Alexander LOMTATIDZE - Qualitative Theory of ODE, History and Development (in Czech language)

16.30 – 17.15   Doc. Jiří ŠREMR - Periodic Solutions to Non-Autonomous Duffing Equations (in Czech language)

WEDNESDAY, FEBRUARY 4th, 2015

Chairman: Prof. Jean Mawhin

09.00 – 09.45   Prof. Celso GREBOGI - Evolutionary Game Theory

10.00 – 10.45   Prof. Jaroslav JAROŠ - Trigonometric Functions and Their Generalizations from the Point of View of Differential Equations

10.45 – 11.15   Coffee break

Chairman: Prof. David Gao

11.15 – 12.00   Prof. Patrizio NEFF - Generalized Korn's Inequalities for Incompatible Tensors

12.15 – 13.00   Prof. Stanisław MIGÓRSKI - Stationary Flow Problems of Non-Newtonian Fluids with Nonmonotone Frictional Boundary Conditions

Streamlining the Mathematics Studies at the Faculty of Science of PalackyUniversity in Olomouc

Registry number: CZ.1.07/2.2.00/28.0141

THURSDAY, FEBRUARY 5th, 2015

Chairman: Prof. Jan Andres

09.00 – 09.45   Prof. Jean MAWHIN - Multiple Solutions for Nonlinear Systems with some Symmetries 2

10.00 – 10.45   Prof. Fabio ZANOLIN - The Poincaré & Birkhoff Fixed Point Theorem: An Historical Overview and Some Applications to the Periodic Problem 1

10.45 – 11.15   Coffee break

Chairman: Dr. Horymír Netuka

11.15 – 12.00   Prof. Jaroslav HASLINGER - A New Incremental Method of Computing the Limit Load in Deformation Plasticity Models

12.00 – 13.15   Lunch break

Chairman: Prof. Stanisław Migórski

13.15 – 14.00   Prof. David GAO - Canonical Dual Finite Element Method and Algorithm for Solving Challenging Problems

14.15 – 15.00   Prof. Mircea SOFONEA - Variational and Hemivariational Inequalities in Contact Mechanics 1

15.00 – 15.30   Coffee break

Chairman: Prof. Fabio Zanolin

15.30 – 16.15   Prof. Alexander DOMOSHNITSKY - Asymptotic and Oscillation Properties and Stability of Second Order Delay Differential Equations

16.30 – 17.15   Prof. Jaroslav JAROŠ - Regularly Varying Functions and Their Applications

FRIDAY, FEBRUARY 6th, 2015

Chairman: Prof. Jaroslav Jaroš

09.00 – 09.45   Prof. Mircea SOFONEA - Variational and Hemivariational Inequalities in Contact Mechanics 2

10.00 – 10.45   Prof. Fabio ZANOLIN - The Poincaré & Birkhoff Fixed Point Theorem: An Historical Overview and Some Applications to the Periodic Problem 2

10.45 – 11.15   Coffee break

Chairman: Prof. Irena Rachůnková

11.15 – 12.00   Prof. Alexander DOMOSHNITSKY - Positivity and Stability of Systems of Delay Differential Equations

12.15 – 13.00   Dr. Andráš RONTÓ - Boundary Value Problems for Ordinary Differential Equations: A Constructive Approach

13.15 – 13.30   Closing

Head of department

prof. RNDr. dr hab. Jan Andres, DSc.

Supervisor of the MATAP project

prof. RNDr. Irena Rachůnková, DrSc.

Manager of the MATAP project

RNDr. Jitka Machalová, Ph.D.