



INVESTMENTS IN EDUCATION DEVELOPMENT

Streamlining the Mathematics Studies at the Faculty of Science
of Palacký University Olomouc

Registry number: CZ.1.07/2.2.00/28.0141

International Symposium on Modern Mathematics and Mechanics

Room 5.006

Programme

June 23 – 27, 2014

Olomouc, Czech Republic





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MONDAY, JUNE 23, 2014

08:30 – 11:00 Consultations

12:30 – 13:00 Registration

13:00 – 13:15 Opening Ceremony

13:15 – 14:00 Symmetry and Lagrangian Duality in Geometrically Linear Systems
Prof. David Y. Gao

14:00 – 14:45 Hemivariational Inequalities: Stationary Problems
Prof. Stanisław Migorski

14:45 – 15:30 Shape Optimization and Free Boundary Problems
Prof. Gunther H. Peichl

Coffee break

15:45 – 16:30 Discretization of Nonlinear Operator Equations: Basic Concepts
Prof. Ewa B. Weinmüller

16:30 – 17:15 Analysis of Two Viscoplastic Frictionless Contact Problems
Prof. Mircea Sofonea

17:15 – 18:00 Moser Iteration Technique and Regularity
Prof. Dumitru Motreanu





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TUESDAY, JUNE 24, 2014

08:30 – 09:15 Shape Derivatives without Taking the Shape Derivative

Prof. Gunther H. Peichl

09:15 – 10:00 Numerical Solution of Singular ODEs: Part 1 – Euler Method

Prof. Ewa B. Weinmüller

Coffee break

10:15 – 11:00 Symmetry Breaking and Unified Modelling in Geometrically
Nonlinear Systems

Prof. David Y. Gao

11:00 – 11:45 Hemivariational Inequalities: Evolutionary Problems

Prof. Stanislaw Migorski

Lunch break

13:15 – 14:00 History-dependent Variational Inequalities

Prof. Mircea Sofonea

14:00 – 14:45 Boundary Value Problems Involving a Nonhomogeneous Operator

Prof. Dumitru Motreanu

14:45 – 15:30 Introduction to Domain Decomposition Methods

Prof. Taoufik Sassi

Coffee break

15:45 – 16:30 Introduction to Inverse Problem with an Emphasis on Biomedical
Applications. Part I.

Prof. Akhtar A. Khan

16:30 – 17:15 Mechanics of Random Media – I

Prof. Martin Ostoja-Starzewski

17:15 – 18:00 Consultations





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WEDNESDAY, JUNE 25, 2014

08:30 – 09:15 Numerical Solution of Singular ODEs: Part 2 – Collocation Method

Prof. Ewa B. Weinmüller

09:15 – 10:00 Primal and Dual Variational Inequalities in Contact Mechanics

Prof. Mircea Sofonea

Coffee break

10:15 – 11:00 Introduction to Inverse Problem with an Emphasis on Biomedical Applications. Part II.

Prof. Akhtar A. Khan

11:00 – 11:45 Mechanics of Random Media – II

Prof. Martin Ostoja-Starzewski

Lunch break

13:15 – 18:00 Consultations





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THURSDAY, JUNE 26, 2014

08:30 – 09:15 Some Aspects of Quasi Variational Inequalities

Prof. Akhtar A. Khan

09:15 – 10:00 Canonical Duality and Unified Solution to Nonconvex Variational/Boundary Value Problems

Prof. David Y. Gao

Coffee break

10:15 – 11:00 Smooth Minimizers Versus Sobolev Minimizers

Prof. Dumitru Motreanu

11:00 – 11:45 Neumann Algorithm: Convergence Results

Prof. Taoufik Sassi

Lunch break

13:15 – 14:45 Optimization of Composite Materials

Prof. Jaroslav Haslinger

14:45 – 15:30 Fractals in Mechanics of Materials

Prof. Martin Ostoja-Starzewski

Coffee break

15:45 – 16:30 Some Iterative Methods for Inverse Problems

Prof. Akhtar A. Khan

16:30 – 18:00 Consultations





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FRIDAY, JUNE 27, 2014

08:30 – 09:15 Thermoelasticity with Finite Wave Speeds

Prof. Martin Ostoja-Starzewski

09:15 – 10:00 Multiple Solutions for Nonlinear Elliptic Problems

Prof. Dumitru Motreanu

Coffee break

10:15 – 11:00 Domain Decomposition Methods for Contact Problems: Numerical Results

Prof. Taoufik Sassi

11:00 – 11:45 Unified Solution to NP-Hard Problems in Global Optimization and
Computer Science

Prof. David Y. Gao

11:45 – 12:00 Closing Ceremony

13:30 – 18:00 Consultations

