Recent Developments in Inverse Coefficient and Source Problems

Minisymposium will be held on the occasion of the 60th birthday of Professor Alemdar Hasanoglu (Hasanov)

Organizers:

- A. El Badia, University of Technology of Compiegne, France (abdellatif.elbadia@utc.fr)
- B. Hofmann, Chemnitz University of Technology, Germany (<u>bernd.hofmann@mathematik.tu-chemnitz.de</u>)
- S. I. Kabanikhin, Ins. of Computational Mathematics and Mathematical Geophysics, Russia (kabanikh@math.nsc.ru)
- D. Lesnic, University of Leeds, UK (<u>D.Lesnic@leeds.ac.uk</u>)
- M. Z. Nashed, University of Central Florida, USA (M.Nashed@ucf.edu)

Invited Speakers

- **V. Vasin**, Modified Newton type methods for approximation of solutions to nonlinear inverse problems and applications, Institute of Mathematics and Mechanics, Ekaterinburg, Russia, vasin@imm.uran.ru
- **V.G. Romanov**, *Inverse problems for viscoelasticity equations*, Sobolev Institute of Mathematics, Russia, *romanov0511@gmail.com*
- **G.S. Dulikravich,** Inverse determination of spatially varying diffusion coefficient in two dimensional objects, Florida International University, USA, dulikrav@fiu.edu
- **A. Yagola,** *Inverse problems on compact sets for PDE,* Moscow State University, Russia, *yagola@physics.msu.ru*
- **A.D. Iskenderov**, R.K. Tagiyev, Variational method of solving the coefficient identification problems for quasilinear parabolic equation, Lenkeran State University, Azerbaijan, r.tagiyev@list.ru
- **M. Slodička**, Recovery of a time-dependent source in a parabolic problem by means of boundary measurements, Ghent University, Belgium, ms@cage.ugent.be
- **D. N. Hào**, B.V. Huong, Daniel Lesnic, *Identification of nonlinear heat transfer laws from boundary observations*, Hanoi Institute of Mathematics, Vietnam, *hao@math.ac.vn*
- **A.** El Badia, Stability estimates for an inverse source problem of Helmholtz's equation from a single Cauchy data at fixed frequency, University of Technology of Compiegne, France
- **D. Lesnic**, Determination of additive and multiplicative sources in the heat equation, University of Leeds, UK, amt5ld@maths.leeds.ac.uk
- **B. Mukanova**, M.Kulbai, E. Tazhibayev, *Inverse source problem for advection diffusion equation:* the numerical recovery via boundary measurement data, L.N. Gumilev Eurasian University, Kazakhstan, mbsha01@gmail.com
- A. Ilyin, S. Kabanikhin, **D. Voronov**, *Numerical solutions of the inverse problems of pharmocokinetics*, NSU, Novosibirsk, Russia, *voronov-dima@mail.ru*; ICM&MG, Novosibirsk, Russia; «Scientific Center for anti-infectious drugs», Almaty, Kazakhstan

- **O. Baysal**, A. Hasanov, *Identification of an unknown time dependent source in a vibrating cantilevered beam from boundary measured bending moment*, Izmir University, Turkey, onur.baysal@izmir.edu.tr
- **B.** Akpayev, A. Hasanov, M. Otelbaev, *A source identification problem related to mathematical model model of laser surface heating,* L.N. Gumilev Eurasian University, Kazakhstan, *bakitjan.akpayev@gmail.com*; Izmir University, Turkey
- **B. Pektaş**, *Determination of a spacewise source in advection-diffusion equation*, Izmir University, Turkey, *burhan.pektas@izmir.edu.tr*
- **A. Erdem**, Experimental study for characterization of time dependent source term and initial temperature, Kocaeli University, Turkey, erdem.arzu@gmail.com
- **M. Shishlenin**, *Regularization of the continuation problems*, Sobolev Institute of Mathematics, Russia, *mshishlenin@ngs.ru*
- **A.A. Sedipkov**, *The inverse spectral problem fort he impedance equation with piecewise continuous coefficients*, Sobolev Institute of Mathematics, Russia, *sedipkov@math.nsc.ru*
- **I.V. Marinin**, D. Khidasheli, *3D visualization and integrated techniques for investigation of the tsunami phenomena*, ICM&MG SB RAS, Novosibirsk, Russia, *igor.marinin@inbox.ru*; WAPMERR, Moscow, Russia
- **E. A. Veral**, W. P. Millhiser, *Designing appointment system templates with operational performance targets*, Baruch College, Zicklin School of Business, USA *Emre.veral@baruch.cuny.edu*
- **Z. Muradoğlu**, F. İlhan, Numerical solution of inverse coefficient problem for non-linear biharmonic equation, Kocaeli University, zahir@kocaeli.edu.tr
- **E. Ozbilge**, Convergence theorem of a 1D coefficient inverse problem, Izmir University of Economics, Turkey, ebru.ozbilge@ieu.edu.tr
- **B.** Abdelaziz, Reconstruction of extended sources with small supports in some elliptic equations from a single Cauchy data, University of Technology of Compiegne, France, batoul.abdelaziz@hds.utc.fr
- **A. Hasanov**, Relationship between representation formulas for unique regularized solutions of inverse source problems with final overdetermination and singular value decomposition of input-output operators, Izmir University, Turkey, alemdar.hasanoglu@izmir.edu.tr
- **T. Johansson**, On source and parameter reconstruction from final data in the heat equation, University of Linkoping, Sweden, tomas.johansson@liu.se
- **S. Asiri**, Taous-Meriem Laleg-Kirati, Modulating functions method for wave source estimation KAUST, Saudi Arabia, sharefa.asiri@kaust.edu.sa