

IPNet Digest    Volume 20, Number 01    January 31, 2013

Today's Editor:

Patricia K. Lamm, Michigan State University

Today's Topics:

New Deadline: Int'l Symposium on Inverse Problems, Design, Optimization  
Call for Papers: Inverse Problems and Optimization in Heat Transfer  
Conference: Mathematical Modelling and Analysis  
PhD Student Position: Inverse Problems in Elasticity  
Table of Contents: Inverse Problems  
Table of Contents: Journal of Inverse and Ill-Posed Problems  
Table of Contents: Journal of Applied Functional Analysis

Submissions for IPNet Digest:

Mail to [ipnet-digest@math.msu.edu](mailto:ipnet-digest@math.msu.edu)

Information about IPNet:

<http://www.math.msu.edu/ipnet>

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From: Olivier Fudym <[fudym@mines-albi.fr](mailto:fudym@mines-albi.fr)>  
Date: Mon, 14 Jan 2013  
Subject: IPDO-2013 Special announcement

Dear Colleagues,

Abstract submission for IPDO-2013 is still possible during the next few days  
(beyond the stated deadline given below)!

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## SPECIAL ANNOUNCEMENT

Download the Last Call for Abstracts  
<http://ipdo2013.congres-scientifique.com>

## Objectives

IPDO Symposium's main objectives are to bring the three communities of researchers in the fields of inverse problems, design theory, and optimization together and provide a common forum for presenting different applications, problems, and solution strategy concepts. Hence, IPDO Symposium is a privileged place for scientific exchanges relating the measurement and theory approaches through the use of suitable optimization algorithms.

## Abstracts and papers submission

Please submit a two-page abstract in pdf format via the symposium website (download Template)

IMPORTANT DATES \*\*\*\* see the note at the beginning of this message \*\*\*\*

January 31, 2012 deadline for submission of two-page abstracts  
February 8, 2013 informing about acceptability of abstracts  
April 15, 2013 deadline for submission of full eight-page papers  
May 15, 2013 deadline for early registration

#### Accommodation

Low cost lodging opportunities in the student houses on the campus are proposed for up to 25 PhD students. Total cost is 100€ per student from Monday to Saturday including 5 nights and 4 breakfasts. Reservations of these studio apartments (one student per studio apartment) should be requested during online registration and will be attributed in the order of online registration.

#### Plenary and keynote lectures

Prof. Alemdar Hasanoglu (Hasanov) - Izmir University, Turkey  
"Inverse source problems related to vibrating cantilevered beam, based on boundary or/and final data measurements"

Prof. Alfred K. Louis - Saarland University, Saarbrücken, Germany  
"Feature Reconstruction in Tomography"

Prof. Carlo Poloni - ESTECO, Trieste, Italy  
"Inverse Problems and Design Optimization: a multidisciplinary industrial perspective"

Prof. Eduardo Souza de Cursi - INSA - Rouen, France  
"Uncertainty Quantification in Numerical Optimization"

Prof. I. Elishakof - Florida Atlantic University, U.S.A.  
"Recent developments in mechanics of structures with uncertainties"

Prof. Patrick Thiran - EPFL, Lausanne, Switzerland  
"Locating the Source of Diffusion in Large-Scale Networks"

Prof. Vassili Toropov - University of Leeds, UK  
"Aerospace applications of multidisciplinary optimization"

#### Contact information

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From: "Woodbury, Keith" <keith.woodbury@ua.edu>  
Date: Mon, 14 Jan 2013 08:02:31 -0600  
Subject: Call for papers: Inverse Problems and Optimization in Heat Transfer

ASME 2013 International Mechanical Engineering Congress & Exposition  
November 15-21, Manchester Grand Hyatt, San Diego CA

Call for Papers: Inverse Problems and Optimization in Heat Transfer

The 2013 ASME IMECE is a unique opportunity to expand international cooperation, understanding, and to promote multidisciplinary research in heat transfer. The ASME Heat Transfer Division K-6 and K-20 committees invite authors to participate in the topical area of Inverse Problems and Optimization in Heat Transfer.

Papers are solicited from all areas of inverse problems in heat transfer, with a focus on inverse and optimal design of heat transfer systems and inverse analysis of experimental data. Topics of interest include:

- \* Mathematical aspects and techniques for inverse analysis and optimization
- \* Optimal design of heat transfer devices
- \* Inverse multi-mode heat transfer problems
- \* Boundary and initial condition reconstruction
- \* Parameter estimation
- \* Imaging and tomography
- \* Remote sensing
- \* Design of experiments

Submit your 400-word text-only abstract to  
<http://www.asmeconferences.org/Congress2013/>  
under Track 9 (Heat Transfer and Thermal Engineering) and Topic 9-17 (Computational Heat Transfer). Please indicate "Inverse Analysis and Optimization" prominently on the abstract.

Publication Schedule:

Abstract Deadline: February 7th, 2013

First Draft: April 15th, 2013

Final Draft: July 29th, 2013

Session Organizers:

Keith Woodbury, University of Alabama, [keith.woodbury@ua.edu](mailto:keith.woodbury@ua.edu)

Kyle Daun, University of Waterloo, [kjdaun@uwaterloo.ca](mailto:kjdaun@uwaterloo.ca)

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From: Uno Hamerik <[Uno.Hamarik@ut.ee](mailto:Uno.Hamarik@ut.ee)>  
Date: Mon, 28 Jan 2013  
Subject: Conference: Mathematical modelling and analysis

The 18th International Conference "Mathematical Modelling and Analysis"  
(MMA2013) and the 4th International Conference "Approximation Methods and  
Orthogonal Expansions (AMOE2013)

May 27 - 30, 2013, Tartu, Estonia

<http://www.ut.ee/mma-amoe2013/>

The conference is dedicated to the 75<sup>th</sup> birthday of Professor Gennadi  
Vainikko

Conference topics:

- \* Modelling and Analysis of Problems of Mathematical Physics and Engineering
- \* Approximation Methods for Differential, Integral and Operator Equations
- \* Orthogonal Expansions, Wavelets and Splines
- \* Singular Problems
- \* Inverse and Ill-Posed Problems

Confirmed plenary speakers:

Hermann Brunner (Hong Kong Baptist University, China)  
Raimondas Ciegis (Vilnius Gediminas Technical Univ, Lithuania)

Zdzislaw Jackiewicz (Arizona State University, USA)  
Barbara Kaltenbacher (University of Klagenfurt, Austria)

Rainer Kress (University of Göttingen, Germany)  
M. Zuhair Nashed (University of Central Florida, USA)

Helmut Neunzert (Fraunhofer Institute, Kaiserslautern, Germany)  
Sergei Pereverzyev (RICAM, Linz, Austria)

Ian H. Sloan (University of New South Wales, Sydney, Australia)  
Gennadi Vainikko (University of Tartu, Estonia)

Deadlines:

Registration and abstract submission: March 15, 2013

Notification of acceptance: March 31, 2013

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From: "Prof. Dr. Thomas Schuster" <thomas.schuster@num.uni-sb.de>  
Date: Mon, 28 Jan 2013  
Subject: Position advertisement

Please see below the advertisement for an open position for a PhD student in my working group (research subject: inverse problems in elasticity).

<http://www.math.uni-sb.de/ag/schuster/joomla/index.php/de/stellenausschreibungen>

Submitted by: Prof. Dr. Thomas Schuster  
Professur für Numerische Mathematik  
Universität des Saarlandes / FR 6.1 Mathematik  
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web: <http://www.math.uni-sb.de/ag/schuster/>

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From: <custserv@iop.org>  
Date: Fri, 28 Dec 2012  
Subject: Inverse Problems, Volume 29, Number 1, January 2013

Inverse Problems      January 2013      Vol. 29, Number 1  
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Large-scale parameter extraction in electrocardiology models through Born approximation    Yuan He and David E Keyes

Summability kernels for circular and spherical mean data  
Marcus Ansorg, Frank Filbir, W R Madych and Ruben Seyfried

On piecewise constant level-set (PCLS) methods for the identification of discontinuous parameters in ill-posed problems

A De Cezaro, A Leitão and X-C Tai

Characterizing kernels of operators related to thin-plate magnetizations via generalizations of Hodge decompositions

L Baratchart, D P Hardin, E A Lima, E B Saff and B P Weiss

Integral equation methods for the inverse obstacle problem with generalized impedance boundary condition  
Fioralba Cakoni and Rainer Kress

An inverse random source problem in quantifying the elastic modulus of nanomaterials    Gang Bao and Xiang Xu

Inverse dipole source problem for time-harmonic Maxwell equations: algebraic algorithm and Hölder stability  
Abdellatif El Badia and Takaaki Nara

Generalized sampling: extension to frames and inverse and ill-posed problems Ben Adcock, Anders C Hansen, Evelyn Herrholz and Gerd Teschke

Some inverse problems arising from elastic scattering by rigid obstacles Guanghui Hu, Andreas Kirsch and Mourad Sini

Corrigenda

Corrigendum: Bounds on positive interior transmission eigenvalues  
E Lakshtanov and B Vainberg

Corrigendum: Linear sampling method for identifying cavities in a heat conductor    Horst Heck, Gen Nakamura and Haibing Wang

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From: "noreply@degruyter.com" <noreply@degruyter.com>  
Date: Thu, 13 Dec 2012 23:07:24  
Subject: Table of Contents 'Journal of Inverse and Ill-Posed Problems'

Journal of Inverse and Ill-Posed Problems    Dec. 2012    Vol. 20, Issue 5-6  
Table of Contents

Extra-optimal methods for solving ill-posed problems  
Leonov, Alexander S.

Regularization for ill-posed parabolic evolution problems  
Fury, Matthew A.

Satisfier function in Ritz–Galerkin method for the identification of a time-dependent diffusivity  
Yousefi, S. A. / Lesnic, Daniel / Barikbin, Zahra

On some identification problem for source function to one semievolutionary system  
Belov, Yuri Y. / Kopylova, Vera G.

Regularization of backward parabolic equations in Banach spaces  
Hào, Dinh Nho / Duc, Nguyen Van

On the existence of global saturation for spectral regularization methods with optimal qualification  
Mazzieri, Gisela L. / Spies, Ruben D. / Temperini, Karina G.

Inverse determination of unsteady temperatures and heat fluxes on inaccessible boundaries    Dennis, Brian H. / Dulikravich, George S.

Well-posedness of the Cauchy problem to a nonlinear magnetoelastic system in 1-D periodic media  
Neves, Wladimir / Priimenko, Viatcheslav / Vishnevskii, Mikhail

A family of rules for the choice of the regularization parameter in the Lavrentiev method in the case of rough  
estimate of the noise level of the data  
Hämarik, Uno / Palm, Reimo / Raus, Toomas

Inverse problems for second-order differential pencils with Dirichlet boundary conditions Buterin, Sergey A. /  
Yurko, Vjacheslav A.

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From: "George A Anastassiou (ganastss)" <ganastss@gmail.com>  
Date: Thu, 24 Jan 2013 11:14:23 -0600  
Subject: Contents, Journal of Applied Functional Analysis

Please see the Table of Contents for the Journal of Applied Functional Analysis, Vol. 8, 2013:

<http://www.eudoxuspress.com/images/TOC-JAFA-2013.pdf>  
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