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IPNet Digest Volume 17, Number 01 January 31, 2010

Today's Editor: Patricia K. Lamm, Michigan State University

Today's Topics:

Chemnitz Symposium on Inverse Problems 2010
Inverse Problems, Design and Optimization Symposium
SIAM Conference on Imaging Science
International Computational Neuroscience Conference
Conference on Nonlinear Science and Complexity
Congress on the CFL condition - 80 years gone by ...
Post-Doctoral Research Associate Position at RPI
Table of Contents: Inverse Problems
Table of Contents: Electronic Trans. on Numerical Analysis
Table of Contents: J. Concrete and Applicable Mathematics
Table of Contents: J. Applied Functional Analysis

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Chemnitz Symposium on Inverse Problems 2010
From: Chemnitz Symposium on Inverse Problems <ip2010@tu-chemnitz.de>
Date: Thu, 28 Jan 2010

Dear Colleagues,

we would like to announce that registration for

Chemnitz Symposium on Inverse Problems, September 23-24, 2010

is now open and online. Please see for details:

<http://www.tu-chemnitz.de/mathematik/ip-symposium/>

You are cordially invited to participate at the symposium.

If there are questions, please do not hesitate to contact us by email or fax. It would be fine if you could give this information to your collaborators and coauthors.

Welcome to Chemnitz!

Yours sincerely

Bernd Hofmann

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Email-addresses:

ip2010@tu-chemnitz.de
or
hofmannb@mathematik.tu-chemnitz.de

Subject: IPDO2010 - INVERSE PROBLEMS, DESIGN AND OPTIMIZATION SYMPOSIUM
From: InvDesOpt <InvDesOpt@dmi.rs>
Date: Thu, 21 Jan 2010

ANNOUNCEMENT AND CALL FOR ABSTRACTS
IPDO2010 - INVERSE PROBLEMS, DESIGN AND OPTIMIZATION SYMPOSIUM

August 25-27, 2010
Joao Pessoa, Brazil
<http://ipdo2010.ipdos.org>

The IPDO2010 Symposium will be held in the beautiful seaside resort city of Joao Pessoa, Brazil, the easternmost city in the Americas. For the symposium participants, the airport of entry in Brazil shall be the International Airport of Recife, which is served by major airline carriers, with everyday flights from cities in North America and Europe. The Symposium's main objectives are to bring the three communities of researchers (inverse problems, design theory and optimization experts) together in a unique international forum that provides an excellent basis for crossfertilization of ideas, as well as for the creation of new synergistic approaches and methodologies. Successful previous versions of the IPDO Symposium were held in Rio de Janeiro (2004) and in Miami Beach (2007). Multidisciplinary contributions dealing with conceptual ideas, theoretical formulations, and practical applications are encouraged, such as in nanotechnology, petrochemistry, aeronautics, astronautics, bio-medicine, transport and sensing of pollutants, materials processing, remote sensing, non-destructive evaluation, material properties determination, acceleration of optimization algorithms, energy conversion, etc.

Authors should send a one-page abstract in pdf (Portable Document Format) to ipdo2010@gmail.com as an attachment to their e-mail message by February 15, 2010. Authors of accepted abstracts will be asked to submit full papers which will appear in an IPDO2010 proceedings. Innovative full papers will be also considered for further review and possible publication in the journal Inverse

Problems in Science and Engineering.

CHAIR:

Zaqueu E. Da Silva, Federal University of Paraiba, Brazil
<zaqueu@les.ufpb.br>

CO-CHAIRS:

Helcio R. B. Orlande, Federal University of Rio de Janeiro, Brazil
<helcio@mecanica.ufrj.br>

Marcelo J. Colaco, Federal University of Rio de Janeiro, Brazil
<colaco@ufrj.br>

George S. Dulikravich, Florida International University, USA
<dulikrav@fiu.edu>

SPONSORS AND PROMOTERS:

ISIPSE (International Society for Inverse Problems in Science and Engineering), ABCM (Brazilian Society of Mechanical Engineering and Sciences), SBMAC (Brazilian Society of Applied and Computational Mathematics), UFPB (Federal University of Paraiba), FIU (Florida International University), UFRJ (Federal University of Rio de Janeiro), NSF, CNPq, CAPES, FAPERJ and Taylor & Francis Publishers.

Subject: SIAM Conference on Imaging Science (IS10)

From: Kirsten Wilden <Wilden@siam.org>

Date: Mon, 18 Jan 2010

Subject:

Registration and Program Now Available
for the SIAM Conference on Imaging Science (IS10)

Conference Name:

SIAM Conference on Imaging Science (IS10)

Location:

Holiday Inn Chicago Mart Plaza, Chicago, Illinois

Dates:

April 12-14, 2010

Invited Presentations:

Guillermo Sapiro, University of Minnesota

Amnon Shashua, The Hebrew University of Jerusalem, Israel

Jean-Luc Starck, CEA/Saclay, France

Gabriele Steidl, Universität Mannheim, Germany

William Symes, Rice University

Alain Trounev, Ecole Normale Supérieure, France

Registration and the conference schedule are now posted at
<http://www.siam.org/meetings/is10/>

PRE-REGISTRATION DEADLINE

March 15, 2010

HOTEL RESERVATION DEADLINE

March 15, 2010

For additional information, contact the SIAM Conference Department at meetings@siam.org.

Subject: CALL FOR REGISTRATION/ABSTRACTS - CNS*2010

From: Theoden Netoff <outreach@cnsorg.org>

Date: Mon, 18 Jan 2010

CNS*2010

Twentieth Annual International Computational Neuroscience Conference

July 24 - July 30, 2010

San Antonio, Texas, USA

<http://www.cnsorg.org>

CALL FOR REGISTRATION AND 2ND CALL FOR ABSTRACTS - CNS*2010

EARLY MEETING REGISTRATION OPEN: January 15, 2010

EARLY MEETING REGISTRATION CLOSED: May 15, 2010 (11 PM Pacific Time, USA)

REGISTRATION WEBSITE: <http://www.cnsorg.org/2010> or

<https://www.regonline.com/CNS2010>

ABSTRACT SUBMISSION OPEN: January 18, 2010

SUBMISSION DEADLINE: February 14, 2010 (11 PM Pacific Time, USA)

NOTIFICATION OF ABSTRACT ACCEPTANCE: April 16, 2010

ABSTRACT SUBMISSION WEBSITE: <http://www.cnsorg.org/2010/submission.shtml>

CNS*2010 will be held in San Antonio, Texas, USA July 24-30th, 2010.

The meeting will kick off with a day of tutorials and an evening welcome reception on July 24th. The main meeting of CNS*2010 will take place from Sunday July 25th-Wednesday July 28th, including a special Symposium, "Computational Neuroscience: What have we learned in 20 years and what do we still need to know?", on the afternoons of July 26th-27th. These events will be followed by two days of workshops on July 29-30th (Thursday-Friday).

The main meeting will be held in the historic Sheraton Gunter Hotel in central San Antonio, one block from San Antonio's Famous River Walk. San Antonio is home to several universities including the University of Texas Health Science Center - San Antonio and the University of Texas San Antonio, which are both sponsoring CNS*2010. As is traditional, the CNS banquet will be an interesting and culturally themed event, hosted at Sundance Ranch on July 28th.

Submissions can include experimental, model-based, as well as more abstract theoretical approaches to understanding neurobiological computation. We especially encourage research that mixes experimental and theoretical studies. We also accept papers that describe new technical approaches to theoretical and experimental issues in computational neuroscience or relevant software packages.

INVITED SPEAKERS:

Miguel Nicolelis, Duke University, USA, Frontiers in Computational Neuroscience Lecturer
Vivian Mushahwar, University of Alberta, Canada
Jonathan Wolpaw, Wadsworth Center and SUNY, USA

SYMPOSIUM SPEAKERS:

John Miller, Montana State University, "Analysis of invertebrate nervous systems as models for understanding complex function"
Ron Calabrese, Emory University, "The more we look, the more biological variation we see: How has and should this influence modeling of small networks"
Alain Destexhe, CNRS - France, "The Nervous System, still noisy after all these years?"
Upinder Bhalla, NCBS- Bangalor India, "Still looking for the memories: molecules and synaptic plasticity."
John Rinzel, NYU, "Modeling neuronal dynamics - our trajectory?"
Bruno Olshausen, University of California Berkeley, "Learning about vision: questions we've answered, questions we haven't answered, and questions we haven't yet asked."
Sharon Crook, Arizona State University, "Learning from the past: Approaches for Reproducibility in Computational Neuroscience"
Avrama Blackwell, George Mason University, "Calcium: the Answer to Life, the Universe, and Everything"
Christiane Linster, Cornell University, "The olfactory system, still computing, but how??"
Michael Hasselmo, Boston University, "20 years of oscillations and memory: The long and winding road linking cellular mechanisms to behavior."

TUTORIALS:

Emery N. Brown, MIT: Neural Signal Processing Algorithms
Astrid Prinz, Emory: Brute force exploration of high-dimensional conductance spaces
Steven Schiff, Penn State: Neural control engineering
Reza Shadmehr, Johns Hopkins: Computational Motor Control
& OTHERS TBA

WORKSHOPS:

see www.cns.org/2010

ABSTRACT SUBMISSION:

Submissions to the meeting will take the form of a formatted abstract. Submission instructions, submission website, and a full description of the review process are at <http://www.cnsorg.org/2010/submission.shtml>. Authors wanting an oral presentation are required to also submit a 1-3-page summary (for the OCNS reviewers only) describing the nature, scope and main results of the work in more detail. The summaries will be reviewed to construct the oral program. All submissions will be acknowledged by e-mail.

OPEN ACCESS, CITABLE ABSTRACT PUBLICATION:

The formatted abstracts will again be published as a Supplement to the

online journal BMC Neuroscience. The supplement is citable, indexed by PubMed, and open access.

At least one author must register for CNS*2010 by the early registration deadline of May 15, 2010 for the abstract to be published and included in the program book. Last year's abstracts are available at the URLs:

--<http://www.cnsorg.org/meetings/archives/CNS2009.shtml>

--<http://www.biomedcentral.com/1471-2202/10?issue=S>.

AWARDS:

A limited number of travel grant awards, based on abstract review, will be available to students. Travel awards are also available for students and postdoctoral fellows attending Tutorials and for postdoctoral fellows presenting at Workshops through a National Science Foundation grant to Ranu Jung at the Center for Adaptive Neural Systems, Arizona State University. Women and underrepresented minorities in STEM are particularly encouraged to apply. See instructions for requesting travel awards at www.cnsorg.org. Recipients of travel grants will be notified by May 5, 2010.

Student posters presented at CNS*2010 will also be judged for cash prizes awarded at the meeting.

Please check www.cnsorg.org periodically for announcement of additional categories of awards for postdoctoral fellows.

OCNS - Organization for Computational Neurosciences, Inc.
<http://www.cnsorg.org>

Subject: NSC10-Turkey
From: Oktay PASHAEV <oktaypashaev@iyte.edu.tr>
Date: Wed, 13 Jan 2010 10:38:35 -0500

The "3rd Conference on Nonlinear Science and Complexity" is going to be held in Cankaya University, Ankara, Turkey in the period of July 28-July 31, 2010.

More information regarding the conference is available at

<http://nsc10.cankaya.edu.tr/index.php>

Submitted by: Dumitru Baleanu, On behalf of NSC10 local Organizing Committee

Subject:CFL condition - 80 years gone by. . . (Call for papers)
From: Carlos Antonio de Moura <demoura@ime.uerj.br>
Date: Sun, 10 Jan 2010

"CFL condition - 80 years gone by. . ."
a meeting at UERJ - Rio de Janeiro, May-3/7-2010

CALL FOR PAPERS

Celebrating the benchmark article published by R. Courant, K. Friedrichs and H. Lewy in 1928 and which redefined numerical algorithms drawn for PDE's, this congress aims to look both at the development such schemes went through during these 80 years, and at the problems we will deal with in the future.

Besides lectures delivered by keynote speakers, namely, Uri Ascher, J. P. Bonatti, Bernardo Cockburn, Saulo M. deBarros, James Glimm, Reuben Hersh, Rolf Jeltsch, Barbara Keyfitz, Peter Lax (main speaker), Philippe G. LeFloch, James MacHyman, Stan Osher, J. C. Portinari and Enrique Zuazua, several panels will be held to discuss related topics.

Contributions may be mailed to cfl80@ime.uerj.br until March 10th. Both .pdf and TeX or LaTeX versions should be submitted and must be at most two page long, bibliography list excluded.

Acceptance communication will be mailed no later than March 31st.

Additional information will be continuously updated at <http://www.ime.uerj.br/cfl80>

Submitted by: Carlos A. de Moura
<http://www.ime.uerj.br/demoura>

Subject: Post-doc position at RPI
From: Birsen Yazici <yazici@ecse.rpi.edu>
Date: Fri, 18 Dec 2009 12:01:32 -0500

Post-Doctoral Research Associate Position at RPI

Description

The post-doctoral research associate will be a part of a team comprising faculty, other academic staff and graduate students working in Electrical, Computer and Systems Engineering and Civil and Environmental Engineering, at Rensselaer Polytechnic Institute. At present we are particularly interested in attracting highly motivated individuals with expertise in the general area of statistical signal processing, with emphasis on pattern recognition, data fusion, image formation and synthetic aperture imagery and radar.

The position will provide the selected candidate with the opportunity to enhance their applied and fundamental skills and make a significant impact in their field of expertise. The research associate will be expected to make significant original contributions to the strategic research interests of the team. The research associate will undertake some administration duties commensurate with the position, mainly as it relates to research.

Required Qualifications

- A PhD in Electrical Engineering, Applied Mathematics or an equivalent qualification.
- Very good knowledge and experience in statistical signal processing, with a particular interest in pattern recognition, data fusion, image formation and synthetic aperture imagery.
- A demonstrated research record of excellence as evidenced by research publications in good international conferences and journals and/or patents.
- Ability to be flexible in pursued research direction, as for example may be demonstrated by completed multi-disciplinary or cross-disciplinary research projects.
- Very good oral and written communication skills.
- Good interpersonal skills and an ability to interact with University staff at all levels.
- The ability to present research results in a comprehensive and timely manner, both through verbal and written means.
- A demonstrated ability to time management and an ability to work to deadlines.

Salary, Start-date and Duration of the Position

- Salary is competitive and commensurate with the qualifications.
- Position will be filled by February 2010
- The duration of the position is for one year with potential renewal for the following three years.

Application Process

Interested candidates, please send your resume, three significant publications and the contact information of three referees to Prof. Birsen Yazici at yazici@ecse.rpi.edu.

Subject: Inverse Problems, volume 26, issue 1, January 2010
From: Emma Avery <Emma.Avery@iop.org>
Date: Mon, 11 Jan 2010

Inverse Problems January 2010 Volume 26, Issue 1
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PUBLISHER'S ANNOUNCEMENT

Editorial developments
Zoe Crossman

PAPERS

The determination of moving boundaries for hyperbolic equations
Gregory Eskin and James Ralston

Uniqueness in the inverse scattering problem in a piecewise
homogeneous medium Xiaodong Liu, Bo Zhang and Guanghui Hu

Multi-scale blind motion deblurring using local minimum
Chao Wang, LiFeng Sun, ZhuoYuan Chen, JianWei Zhang and ShiQiang Yang

A variational perspective on controllability Pablo Pedregal

An approximation error approach for compensating for modelling errors
between the radiative transfer equation and the diffusion
approximation in diffuse optical tomography
T Tarvainen, V Kolehmainen, A Pulkkinen, M Vauhkonen, M Schweiger,
S R Arridge and J P Kaipio

A universal filter for enhanced imaging with small arrays
Liliana Borcea, Thomas Callaghan, Josselin Garnier and
George Papanicolaou

A decoupling-based imaging method for inverse medium scattering for
Maxwell's equations A Lakhal

A comparison of seismic velocity inversion methods for layered
acoustics T van Leeuwen and W A Mulder

Inverse spectral problems for Sturm--Liouville operators with
matrix-valued potentials Ya V Mykytyuk and N S Trush

An analysis of the accuracy of the linear sampling method for an
acoustic inverse obstacle scattering problem
Nguyen Trung Thanh and Mourad Sini

Direct localization of poles of a meromorphic function from
measurements on an incomplete boundary
Takaaki Nara and Shigeru Ando

CORRIGENDUM

Corrections to the 'Enhancement of microwave tomography through the
use electrically conducting enclosures' C Gilmore and J LoVetri

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
<http://www.iop.org/EJ/toc/0266-5611/26/1>

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PAPERS

Morozov's discrepancy principle for Tikhonov-type functionals with nonlinear operators Stephan W Anzengruber and Ronny Ramlau

Numerical methods for the design of large-scale nonlinear discrete ill-posed inverse problems E Haber, L Horesh and L Tenorio

Constructibility of an $L_{\infty}(\mathbb{R}^2)$ solution to an inverse Sturm-Liouville problem using three Dirichlet spectra Mihaela Cristina Drignei

Nonnegative least-squares image deblurring: improved gradient projection approaches F Benvenuto, R Zanella, L Zanni and M Bertero

Stability for an inverse problem for a two-speed hyperbolic PDE in one space dimension Rakesh and Paul Sacks

Stability of the gauge equivalent classes in inverse stationary transport Stephen McDowall, Plamen Stefanov and Alexandru Tamasan

Accelerated projected steepest descent method for nonlinear inverse problems with sparsity constraints Gerd Teschke and Claudia Borries

Synthetic-aperture radar imaging through dispersive media Trond Varslot, Hector Morales and Margaret Cheney

Monitoring hydraulic fractures: state estimation using an extended Kalman filter Fernando Alves Rochinha and Anthony Peirce

Eigenfunction contrast source inversion for circular metallic enclosures Puyan Mojabi and Joe LoVetri

Inverse transport theory of photoacoustics Guillaume Bal, Alexandre Jollivet and Vincent Jugnon

Individual articles are free for 30 days following their publication on the web. This issue is available at:
<http://www.iop.org/EJ/toc/0266-5611/26/2>

Submitted by Emma Avery, Senior Production Editor
E-mail: emma.avery@iop.org

Subject: ETNA, ToC, Vol. 35
From: Lothar Reichel <reichel@math.kent.edu>
Date: Sun, 24 Jan 2010

Electronic Transactions on Numerical Analysis 2009 Volume 35
Table of Contents

Diameter bounds for equal area partitions of the unit sphere
P. Leopardi

Structural and recurrence relations for hypergeometric-type functions
by Nikiforov-Uvarov method
J. L. Cardoso, C. M. Fernandes, and R. Alvarez-Nodarse

Convergence of a lattice numerical method for a boundary-value problem
with free boundary and nonlinear Neumann boundary conditions
I. A. Chernov

A full-Newton approach to separable nonlinear least squares problems
and its application to discrete least squares rational approximation
C. F. Borges

Spectral approximation of variationally formulated eigenvalue problems
on curved domains A. Alonso and A. Dello Russo

On modified asymptotic series involving confluent hypergeometric
functions A. Deano and N. M. Temme

Acceleration of implicit schemes for large systems of nonlinear ODEs
M. Al Sayed Ali and M. Sadkane

Monotone convergence of the Lanczos approximations to matrix functions
of Hermitian matrices A. Frommer

On the fast reduction of symmetric rationally generated Toeplitz
matrices to tridiagonal form
K. Frederix, L. Gemignani, and M. Van Barel

Spherical quadrature formulas with equally spaced nodes on latitudinal
circles D. Rosca

The heat transform and its use in thermal identification problems for
electronic circuits S. Kindermann and M. Janicki

Convergence issues in the theory and practice of iterative
aggregation/disaggregation methods
I. Marek, P. Mayer, and I. Pultarova

Gaussian Direct Quadrature methods for double delay Volterra integral
equations A. Cardone, I. Del Prete, and C. Nitsch

Large-scale Kalman filtering using the limited memory BFGS method
H. Auvinen, J. M. Bardsley, H. Haario, and T. Kauranne

An efficient generalization of the Rush-Larsen method for solving
electro-physiology membrane equations M. Perego and A. Veneziani

Boundary conditions in approximate commutator preconditioners for the
Navier-Stokes equations H. C. Elman and R. S. Tuminaro

In 2009 also the following special ETNA volumes were completed:

Vol. 33: Special volume on Matrix Analysis and Applications, dedicated to Gerard Meurant

Vol. 34: Special volume dedicated to Víctor Pereyra

ETNA is available at <http://etna.math.kent.edu> and at several mirror sites. ETNA is in the extended Science Citation Index and the CompuMath Citation Index.

Subject: TABLE OF CONTENTS JCAAM VO8, 2010
From: "George A Anastassiou (ganastss)" <ganastss@gmail.com>
Date: Tue, 26 Jan 2010

Journal of Concrete and Applicable Mathematics 2010 Vol 8

See table of contents at:
http://www.eudoxuspress.com/images/TOTAL_TABLE_OF_CONTENTS_JCAAM-VOL_8--2010.pdf

Submitted by: George A. Anastassiou, Ph.D
Department of Mathematical Sciences, The University of Memphis,
Memphis, TN 38152, USA
tel:(INT 001)- 901-678-3144 office Fax: 901-678-2480

Subject: JAFA 2010
From: "George A Anastassiou (ganastss)" <ganastss@gmail.com>
Date: Sat, 30 Jan 2010

Journal of Applied Functional Analysis 2010 Vol. 5

See table of contents at:
http://www.eudoxuspress.com/images/JAFA-10-VOL-5-TABLE_OF_CONTENTS.pdf

Submitted by: George A. Anastassiou, Ph.D
Department of Mathematical Sciences, The University of Memphis,
Memphis, TN 38152, USA
tel:(INT 001)- 901-678-3144 office Fax: 901-678-2480
----- end -----

Today's Editors:

Patricia K. Lamm, Michigan State University
Zhewei Dai, Alma College

Today's Topics:

RTG Summer School: Inverse Problems & PDEs
Conference: Inverse Problems in Science & Engineering
Int'l Conference: Inverse Problems: ID, Design, and Control
Symposium: Inverse Problems, Design, and Optimization
Int'l Workshop: Optimization, Inverse Problems in Electromagnetism
Special AGU Session: Inverse Problems in Geosciences
Int'l Congress: Image and Signal Processing
Ph.D. and Postdoctoral Positions for Imaging Project at IACM/FORTH
Table of Contents: Inverse Problems
Table of Contents: Nonlinear Analysis: Modelling and Control
Table of Contents: Int'l Journal of Tomography & Statistics
Table of Contents: Journal of Computational Analysis and Applications

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

PLEASE NOTE: Some of the meeting announcements below contain deadlines which are imminent (or already past -- generally in these cases early announcements appeared in prior IPNet Digests). Please contact the organizers to see if the deadlines have/can be extended. --Ed.

Subject: RTG Summer School on Inverse Problems & PDEs
From: Gunther Uhlmann <gunther@math.washington.edu>
Date: Thu, 18 Feb 2010

June 28-July 16, 2010
University of Washington, Seattle
<http://www.math.washington.edu/ipde/summer>

The Research Training Group in the Department of Mathematics at the University of Washington will host a summer school for advanced undergraduates and beginning graduate students on Inverse Problems & Partial Differential Equations. Students will attend lectures in the morning and problem sessions in small groups with mentors in the afternoon. On-campus accommodation and meals will be provided, plus a travel allowance of up to \$500. Two mini-courses will be given:

Gunther Uhlmann, Peter Kuchment: The Radon Transform and the X-Ray Transform

Hart Smith: Orthogonal Bases and Multi-scale Analysis

Apply online by April 1 at <http://www.math.washington.edu/ipde/summer>

(The Summer School is supported by an NSF Research Training Grant. Support is restricted to U.S. citizens/permanent residents. Applications from international students may be considered, but international students must provide their own support for travel, accommodation, and meals.)

Subject: 2010 Conf. for Inverse Problems in Science & Engineering
From: "Dolan, Kirk" <dolank@anr.msu.edu>
Date: Tue, 02 Mar 2010

Call for Abstracts for the 2010 Inverse Problems Symposium,
June 6-8, 2010 at Michigan State University.

We are interested in a wide range of topics in engineering, agriculture, natural sciences, mathematics, statistics, etc. You are invited to submit a 1-3 page extended abstract (including figures) for your oral presentation. A written paper is not required and the extended abstracts will not be subject to copyright. Abstract submission has been extended to April 15th, because travel funding may be available for graduate students. Details are forthcoming. The website is www.inverseproblems2010.org.

The schedule is listed at:

<http://www.inverseproblems2010.org/agenda/index.html>

The registration fees of \$150 regular, \$100 for students. The fee includes the tutorial (Survey of Parameter Estimation) on Sunday afternoon, the conference CD, 2 continental breakfasts, 2 lunches, break refreshments, and Monday evening banquet.

This is one of the few inverse problems symposiums covering such a wide range of research and industry problems, and offering a workshop on parameter estimation techniques. We look forward to your participation!

Best regards,

Kirk Dolan (Conference Chairperson), Jongeun Choi (co-chair), Cara Brooks (co-chair) and James Beck (Honorary Chairperson)

IPS 2010 Schedule
Kellogg Center, Michigan State University

Sunday June 6th

3:30-5:30pm Tutorial: Survey of Parameter Estimation

3:30-4:20 James Beck, Emeritus Professor, Michigan State University

4:20 break

4:30-4:50 Bob McMasters, Mechanical Engineering, Virginia Military Institute

4:50-5:10 Seungik Baek, Mechanical Engineering, Michigan State University

5:10-5:30 Kevin Cole, Mechanical Engineering, University of Nebraska, Lincoln.

Monday, June 7th

8:00 Continental Breakfast

8:30 Greetings Satish Udpa, Dean, College of Engineering, Michigan State University

8:40am-9:20 Inverse Problems Applied to Alternative Energy, Douglas Adams, Mechanical Engineering, Purdue University

9:20-10:30 presentations

10:30-10:40 break

10:40-noon presentations

Noon Lunch

13:00-15:00 Presentations

15:00 break

15:15-17:00 Presentations

18:30 Social hour

19:00 Banquet

20:00 Speaker: Inverse Problems in Physics and Image Reconstruction in Positron Emission Tomography, Dr. Kevin Berger, Assistant Professor of Radiology, Assistant Chair of Radiology, Dept. of Radiology, Michigan State University

Tuesday, June 8th

8:00 Continental Breakfast

8:30-9:15 Presentation on simulation software, Comsol

9:15-10:30 presentations

10:30-10:40 break

10:40-noon presentations

Noon Lunch

13:00-15:00 Presentations

15:00 break

15:15-16:45 Presentations

16:45-17:00 Closing comments

Registration fee includes Sunday tutorial, two breakfasts, two lunches, one banquet, and CD with all presentations.

Submitted by: Kirk Dolan, Associate Professor

Department of Food Science & Human Nutrition
Department of Biosystems & Agricultural Engineering
135 Trout Food Science Building
Michigan State University

Subject: 6th Int'l Conference - Inverse Problems: Identification,
Design and Control
From: 6ICIP <6icip@cosmos.com.ru>
Date: Wed, 10 Feb 2010

Dear Colleagues

Please find enclosed the Call_for_Papers.pdf of 6th International
Conference on Inverse Problems: Identification, Design and Control.

We would very much appreciate your participation in this conference.

The scientific quality of this meeting will benefit greatly from the
participation of professionals, like yourself having outstanding
achievements in your field of expertise.

Also we would like to remind, that until present time only
international conferences in Russia provide opportunity to meet a wide
range of Russian scientists and engineers. Also this river cruise will
provide great opportunity to look at provincial Russia as well as
post- and pre- conference tours at Moscow.

Please, do not worry, if you have sent abstract yet, because I have
used my personal address list.

We believe sincerely that contribution will greatly enhance the
scientific level of the Conference and therefore look forward to
hearing from you.

Sincerely yours

On behalf of the Organizing Committee

Aleksey Nenarokomov
Professor of Mechanical Engineering
Associate Dean of Aerospace School
Moscow Aviation Institute
4 Volokolamskoe Hgw., Moscow, 125993, Russia
Tel: 7(499)1584790, Fax: 7(499)1582977
E-mail:Aleksey.nenarokomov@cosmos.com.ru

Subject: IPDO2010 - final announcement and call for abstracts -
inverse problems, design and optimization symposium
From:InvDesOpt <InvDesOpt@dmi.rs>
Date: Sat, 13 Feb 2010

Announcement and Call for Abstracts
IPDO2010 - Inverse Problems, Design and Optimization Symposium

August 25-27, 2010
João Pessoa, Brazil
<http://ipdo2010.ipdos.org>

The IPDO2010 Symposium will be held in the beautiful seaside resort city of João Pessoa, Brazil, the easternmost city in the Americas. For the symposium participants, the airport of entry in Brazil shall be the International Airport of Recife, which is served by major airline carriers, with everyday flights from cities in North America and Europe. The Symposium's main objectives are to bring the three communities of researchers (inverse problems, design theory and optimization experts) together in a unique international forum that provides an excellent basis for crossfertilization of ideas, as well as for the creation of new synergistic approaches and methodologies. Successful previous versions of the IPDO Symposium were held in Rio de Janeiro (2004) and in Miami Beach (2007). Multidisciplinary contributions dealing with conceptual ideas, theoretical formulations, and practical applications are encouraged, such as in nanotechnology, petrochemistry, aeronautics, astronautics, bio-medicine, transport and sensing of pollutants, materials processing, remote sensing, non-destructive evaluation, material properties determination, acceleration of optimization algorithms, energy conversion, etc.

Authors should send a one-page abstract in pdf (Portable Document Format) to ipdo2010@gmail.com as an attachment to their e-mail message by February 15, 2010. Authors of accepted abstracts will be asked to submit full papers which will appear in an IPDO2010 proceedings. Innovative full papers will be also considered for further review and possible publication in the journal Inverse Problems in Science and Engineering.

CHAIR:
Zaqueu E. Da Silva, Federal University of Paraiba, Brazil
<zaqueu@les.ufpb.br>

CO-CHAIRS:
Helcio R. B. Orlande, Federal University of of Rio de Janeiro, Brazil
<helcio@mecanica.ufrj.br>
Marcelo J. Colaco, Federal University of Rio de Janeiro, Brazil
<colaco@ufrj.br>
George S. Dulikravich, Florida International University, USA
<dulikrav@fiu.edu>

SPONSORS AND PROMOTERS:
ISIPSE (International Society for Inverse Problems in Science and Engineering), ABCM (Brazilian Society of Mechanical Engineering and Sciences), SBMAC (Brazilian Society of Applied and Computational Mathematics), UFPB (Federal University of Paraiba), FIU (Florida International University), UFRJ (Federal University of Rio de

Janeiro), NSF, CNPq, CAPES, FAPERJ and Taylor & Francis Publishers.

Subject: OIPE 2010 Second Announcement and Call for Papers
From: OIPE 2010 <oipe@ef12226-2.tu-sofia.bg>
Date: Fri, 5 Mar 2010
To: "OIPE.2010.Mail.List@juno.math.msu.edu"
<OIPE.2010.Mail.List@juno.math.msu.edu>

Dear Colleague,

Please find attached the Call for papers for the XI-th International Workshop on Optimization and Inverse Problems in Electromagnetism, to be held in Sofia, Bulgaria, from 14 to 18 September 2010.

The deadline for the 2-page digests is 31 March, 2010.

Selected papers will be published in three international journals.

More information is available on the web-site of the Workshop at oipe.tu-sofia.bg

Looking forward to meeting you in Sofia,

Best regards,

Ivan Yatchev,
OIPE 2010 Chairman

Subject: AGU Meeting 2010 - "Inverse Problems in Geosciences"
From: Haroldo de Campos Velho <haroldo@lac.inpe.br>
Date: Thu, 11 Mar 2010

Inverse problems in geosciences:

Dr. Valeria Barbosa (Observatório Nacional, Brazil), Prof. Jacques Blum (Laboratoire J. A. Dieudonné, Université de Nice, France), Dr. Steven Cocke (COAPS Center for Ocean-Atmospheric Prediction Studies, Florida State University, USA), and I would like to invite you to submit abstracts to the session IN04: Inverse problems in geosciences at 2010 The Meeting of the Americas being held 08-13 August 2010 in Iguassu Falls, Brazil.

Inverse problems are a central issue in many branches of science and engineering. This session is an opportunity to share inverse techniques and procedures for solving relevant applications and theoretical efforts in geosciences: meteorology, oceanography, hydrology, environmental sciences, geophysics, ionosphere dynamics, and data assimilation.

The invited speakers for Session IN04 are:

Fernando S. Moraes (UENF, Brazil)
Didier Auroux (Université de Nice, France)
Steven Cocke (COAPS, USA)
Takemasa Miyoshi (University of Maryland, USA)

More information about the session is available at:
http://www.agu.org/meetings/ja10/program/scientific_session_search.php?show=detail&sessid=111

The deadline to submit an abstract is 31-March-2010

More information about the meeting, travel grants, housing and registration: <http://www.agu.org/meetings/ja10/index.php>

Thank you for considering this invitation.

Haroldo F. de Campos Velho, INPE
email: haroldo@lac.inpe.br
Associate Director: Space and Environment
Senior Researcher
Caixa Postal 515, 12245-970 Sao José dos Campos, SP
Brazil

Subject: CISP'10-BMEI'10 Submission Deadline 15 April,
Yantai, China (EI/ISTP/IEEE Xplore)
From: CISP'10-BMEI'10 <cisp_bmei_cfp@ytu.edu.cn>
Date: Sat, 13 Mar 2010

Dear Colleague,

The 3rd International Congress on Image and Signal Processing (CISP 2010) and the 3rd International Conference on BioMedical Engineering and Informatics (BMEI 2010) will be jointly held from 16 to 18 October 2010 in Yantai, China.

CISP10-BMEI10 is a premier international forum for scientists and researchers to present the state of the art of multimedia, signal processing, biomedical engineering and informatics. The previous CISP09-BMEI09 attracted over 3000 submissions from around the world. The registration fee of US\$390 includes proceedings, lunches, dinners, banquet, coffee breaks, and all technical sessions. CISP10-BMEI10 is technically co-sponsored by the IEEE Engineering in Medicine and Biology Society.

All papers in conference proceedings will be indexed by both EI Compendex and ISTP, as well as the IEEE Xplore (CISP 2010 IEEE Catalog Number: CFP1094D-PRT, ISBN: 978-1-4244-6514-9; BMEI 2010 IEEE Catalog Number: CFP1093D-PRT, ISBN: 978-1-4244-6496-8. CISP-BMEI 2008 and 2009 papers have already been indexed in EI Compendex). Substantially extended versions of best papers will be considered for publication in a CISP10-BMEI10 special issue of the Computers and Electrical Engineering journal (SCI-indexed).

Yantai was listed as one of the world's most inhabitable places by the United Nations and was recognized as the "most charming city of China" by China Central Television. Undulating hills rise above the area's many rivers and are framed by beaches and neighboring islands. Famous tourist attractions include the Tashan Mountain, Kongdong Island, and Penglai Pavilion Scenic Area. Seafood and fruits are plentiful in Yantai.

For more information, visit the conference web page:

<http://cisp-bmei2010.ytu.edu.cn>

If you have any questions after visiting the conference web page, please email the secretariat at cisp_bmei@ytu.edu.cn

Join us at this major event in beautiful Yantai !!!

Organizing Committee

cisp_bmei@ytu.edu.cn

P.S.: Kindly forward to your colleagues or students who may be interested.

Subject: PHD and postdoctoral positions at IACM/FORTH.
From: Chrysoula Tsogka <tsogka@tem.uoc.gr>
Date: Mon, 8 Feb 2010

PHD and postdoctoral positions available at IACM/FORTH.

PHD and postdoctoral positions are available for the research project ADAPTIVES. ADAPTIVES has been approved for funding by the European Research Council, through a Starting Independent Research Grand awarded to Chrysoula Tsogka Associate Professor at the Dept. of Applied Mathematics, University of Crete and researcher at IACM/FORTH. Duration of project: 5 years.

Short summary of the project: Waves are been used for the detection and imaging of objects for many years. We all know the radar, which uses electromagnetic waves, the sonar that is based on acoustic waves, and medical ultrasound. In most of these applications the materials encountered in practice are often complex and their properties are not known - and cannot be estimated - in every detail. We, therefore, model the propagation medium as a random process for which we know some statistical properties. Our goal is to solve the imaging problem in a regime where multipathing due to the heterogeneities is important. The challenge is to produce reliable, i.e., statistically stable, results, especially when there is no a priori knowledge about the propagation medium.

The research to be carried out in the project ADAPTIVES needs young researchers to get involved. Requirements are background in and/or an

interest in scientific computing, numerical solution of differential equations (in particular wave propagation) and inverse problems. The candidates will be funded by the European Research Council. Applications should comprise of a letter of motivation, a CV plus the names and contact information of two individuals who have agreed to send letters of recommendation.

The positions are located at the Institute of Applied and Computational Mathematics (IACM) at FORTH, Heraklion, Crete, Greece (<http://www.iacm.forth.gr/>).

Contact: C. Tsogka, tsogka@tem.uoc.gr, <http://www.tem.uoc.gr/~tsogk>

Postdoctoral positions at the Archimedes Center for Modeling Analysis and Computation.

The Archimedes Center for Modeling Analysis and Computation (ACMAC) is a newly created center, housed in the Department of Applied Mathematics of the University of Crete, and funded by the FP7 programme of the European Commission.

The center aims to promote academic excellence in Applied Mathematics and fosters the interface of modeling, analysis and computation. Please check the website <http://acmac.tem.uoc.gr/> for more information.

ACMAC announces several postdoc positions in applied mathematics: we seek for mathematical scientists near the beginning of their career who have a background in and/or an interest in the areas of modeling, analysis and computation.

The candidates will interact with faculty members of the department of Applied Mathematics at the University of Crete and short- and long-term ACMAC visitors. Please check the department's web page for information on the faculty members and their research interests. <http://www.tem.uoc.gr/en/people.html>

Duration and funding: ACMAC postdoctoral fellowships run from short term periods up to two years starting September 1, 2010. The candidates will be funded by the FP7 programme of the European Commission.

Applications should comprise a letter of motivation, a CV plus the names and contact information of two individuals who have agreed to send letters of recommendation.

Contact: acmac_postdocs@tem.uoc.gr

Chrysoula Tsogka
Department of Applied Mathematics, University of Crete

GR-71409 Heraklio, Crete, Greece
Tel: +302810393730 Fax:+302810393701
tsogka@tem.uoc.gr www.tem.uoc.gr/~tsogka

Subject: Inverse Problems, volume 26, issue 3, March 2010
From: Emma Avery <Emma.Avery@iop.org>
Date: Tue, 2 Mar 2010

Inverse Problems March 2010 Volume 26, Issue 3
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Local detection of three-dimensional inclusions in electrical impedance tomography T Ide, H Isozaki, S Nakata and S Siltanen

Deblurring of class-averaged images in single-particle electron microscopy
Wooram Park, Dean R Madden, Daniel N Rockmore and Gregory S Chirikjian

Conformational freedom of proteins and the maximal probability of sets of orientations Luca Sgheri

Online parameter identification without Riccati-type equations in a class of time-dependent partial differential equations: an extended state approach with potential to partial observations P K\"ugler

Convergence rate analysis of the first-stage Runge--Kutta-type regularizations P Pornsawad and C B\"ockmann

A family of isospectral Euler--Bernoulli beams
Graham M L Gladwell and Antonino Morassi

Convergence rates for the iteratively regularized Gauss--Newton method in Banach spaces Barbara Kaltenbacher and Bernd Hofmann

Compressive inverse scattering: I. High-frequency SIMO/MISO and MIMO measurements Albert C Fannjiang

Compressive inverse scattering: II. Multi-shot SISO measurements with born scatterers Albert C Fannjiang

Hierarchical regularization for edge-preserving reconstruction of PET images Johnathan M Bardsley, Daniela Calvetti and Erkki Somersalo

On the Hochstadt--Lieberman theorem O Martinyuk and V Pivovarchik

Simultaneous identification of the diffusion coefficient and the potential for the Schr\"odinger operator with only one observation
Laure Cardoulis and Patricia Gaitan

High-order total variation minimization for interior tomography
Jiansheng Yang, Hengyong Yu, Ming Jiang and Ge Wang

Spherical means with centers on a hyperplane in even dimensions
E K Narayanan and Rakesh

Structural level set inversion for microwave breast screening
Natalia Irishina, Diego Alvarez, Oliver Dorn and Miguel Moscoso

CORRIGENDUM

A new algorithm for the shape reconstruction of perfectly conducting objects
M Jayren, I Akduman, A Yapar and L Crocco

Individual articles are free for 30 days following their publication
on the web.

This issue is available at: <http://www.iop.org/EJ/toc/0266-5611/26/3>

Submitted by Emma Avery, Senior Production Editor
E-mail: emma.avery@iop.org

Subject: Table of Contents, Nonlinear Analysis: Modelling and Control
From: Romas Baronas <romas.baronas@mif.vu.lt>
Date: Fri, 5 Mar 2010

Nonlinear Analysis: Modelling and Control 2010 Vol. 12, No. 1
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Taylor-Couette flow of a generalized second grade fluid due to a
constant couple M. Athar, M. Kamran, C. Fetecau.

N-distance tests of uniformity on the hypersphere A. Bakshaev.

Run up flow of a couple stress fluid between parallel plates
M. Devakar, T.K.V. Iyengar.

State-feedback stabilization for stochastic high-order nonlinear
systems with a ratio of odd integers power L. Liu, N. Duan.

MHD natural convection in an inclined cavity filled with a fluid
saturated porous medium with heat source in the solid phase
M.A. Mansour, A.J. Chamkha, R.A. Mohamed, M.M. Abd El-Aziz, S.E. Ahmed.

Rich dynamics of an SIR epidemic model
S. Pathak, A. Maiti, G.P. Samanta.

Analytic approximate solutions for unsteady boundary-layer flow and
heat transfer due to a stretching sheet by homotopy analysis method
M.M. Rashidi, S.A. Mohimani Pour.

Analysis of a delay nonautonomous predator-prey system with disease in
the prey G.P. Samanta.

Computed chaos or numerical errors L.-S. Yao.

For a paper submission, please refer to <http://www.lana.lt/journal>

Submitted by Dr. Romas Baronas, Journal Secretary
Nonlinear Analysis: Modelling and Control

Subject: [IJTS] TOC: Summer 2010, Volume 14 (Special Volume), Number S10
From: ijts.tanujfma <tanujfma@yahoo.com>
Date: Tue, 16 Mar 2010

International Journal of Tomography & Statistics 2010 Vol. 14, No. S10
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Editorial: IJTS Special Volume on Image Processing-II
João Manuel R. S. Tavares, Renato Renato M. Natal Jorge

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T. Cadavez, S. C. Ferreira, P. Medeiros, P. J. Quaresma, L. A. Rocha,
A. Velhinho, G. Vignoles

Feature Selection based on Genetic Algorithm compared to Mutual
Information: A Case Study for Face Recognition
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An Understanding of Mechanical Behaviour and Damage Mechanism in
Elastomers using X-Ray Computed Tomography at Several Scales
K. Bessri, F. Montembault, E. Bayraktar, C. Bathias

Detection of Small Bowel Tumors in Endoscopic Capsule Images by Modeling
Non-Gaussianity of Texture Descriptors
D. Barbosa, J. Ramos, A. Tavares, C.S. Lima

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Identification of Log Characteristics in Computed Tomography Images of
Black Spruce (*Picea Mariana*) Logs by Means of Maximum Likelihood
Classifier Qiang Wei, Shu Yin Zhang, Ying Hei Chui, Brigitte Leblon

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Algorithms versus Simulated Annealing Romana Rytsar, Thierry Pun

Multi-Stage Fusion of Local and Global Features Based Classification
for Face Recognition
M. El Aroussi, S. Ghouzali, M. El Hassouni, M. Rziza, D. Aboutajdine

Contour Detection and Recovery through Bio-Medical Watermarking for
Telediagnosis K. Pal, V.H. Mankar, T.S. Das, S. K. Sarkar

Journal website:
<http://www.ceserp.com/cp-jour/index.php?journal=ijts&page=index>

Subject: Table of Contents, JOCAA
From: "George A Anastassiou (ganastss)" <ganastss@gmail.com>
Date: Wed, 10 Feb 2010

<http://www.eudoxuspress.com/images/2010-COMPLETE-TABLE-OF-CONTENTS-JOCAA-VOL-12.pdf>

Submitted by: George A. Anastassiou, Ph.D
Professor of Mathematics, Department of Mathematical Sciences
The University of Memphis, Memphis, TN 38152, USA
tel:(INT 001)- 901-678-3144 office, 901-678-2482 secr.
Fax: 901-678-2480
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IPNet Digest Volume 17, Number 03 April 29, 2010

Today's Editor: Patricia K. Lamm, Michigan State University

Today's Topics:

Symposium on Statistical Methods in Inverse Problems
Student Support for 2010 Inverse Problems Symposium
New Deadline for Workshop on Inverse Problems in Electromagnetism
Open Research Positions at Centre for Computational Imaging
Table of Contents: Inverse Problems

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Symposium on inverse problems at ICNAAM 2010
From: "hanna.pikkarainen@oeaw.ac.at" <hanna.pikkarainen@oeaw.ac.at>
Date: Thu, 15 Apr 2010

Dear colleagues,

we are organising a symposium with title

Statistical Methods in Inverse Problems

at the International Conference of Numerical Analysis and Applied Mathematics held in Rhodes, Greece on September 19-25, 2010. The web page of the conference is <http://www.icnaam.org/>.

The description of the topic of the symposium is:

Recently, statistical approaches to inverse problems have become increasingly popular, but have been studied rather independently in separate communities. The main difference between the frequentist and the Bayesian inversion lies in the interpretation of the solution. Whereas frequentists utilize estimators based on the statistical decision theory, the latter approach applies the Bayes formula. However, many similarities exist when the goal is regularization of illposedness. This symposium intends to provide an overview on new developments and interplay between these two statistical approaches to inverse problems. Both theoretical questions and applications are discussed.

The symposium is open for applications. The deadline for the abstract submission is July 22, 2010. The acceptance of the presentations will be notified at the latest on July 29, 2010.

The instructions for preparing the abstract and corresponding template can be found from the web page <http://www.icnaam.org/abstract.htm>
The abstracts will be published in a special volume of AIP Conference Proceedings. The abstracts should be sent by email to tapio.helin@oeaw.ac.at or hanna.pikkarainen@oeaw.ac.at.

Yours sincerely,

Tapio Helin and Hanna Katriina Pikkarainen

Dipl.-Ing. Dr. Hanna Katriina Pikkarainen
Johann Radon Institute for Computational and Applied Mathematics
Austrian Academy of Sciences
Altenbergerstrasse 69 A-4040 Linz Austria
E-mail: hanna.pikkarainen@oeaw.ac.at
Tel: +43 (0)732 2468 5233 Fax: +43 (0)732 2468 5212
<http://www.ricam.oeaw.ac.at/people/page/pikkarainen/> .

Subject: NSF Funding Available for Graduate Student Travel to
IPS 2010, Mich. St. U.
From: "Dolan, Kirk" <dolank@anr.msu.edu>
Date: Mon, 19 Apr 2010

NSF Funding Available for U.S. University Graduate Students in Thermal Processes to Attend 2010 Inverse Problems Symposium, June 6-8, 2010 at Michigan State University.

Student Travel Funding is available for to IPS 2010! Funding up to \$500 per student is available from National Science Foundation Thermal Transport Processes Program.

Eligibility:

1. Must be a graduate student at a U.S. university (Michigan State University students are not eligible).
2. Must be working in engineering or food science aspects of heat transfer.
3. Must submit a statement by April 30th to dolank@msu.edu expressing why you wish to attend IPS 2010.

Special positive consideration is given to minority and underrepresented applicants.

The schedule is listed at:

<http://www.inverseproblems2010.org/agenda/index.html>

The registration fees are \$150 regular, \$100 for students. The fee includes the tutorial (Survey of Parameter Estimation) on Sunday

afternoon, the conference CD, 2 continental breakfasts, 2 lunches, break refreshments, and Monday evening banquet.

This is one of the few inverse problems symposiums covering such a wide range of research and industry problems, and offering a workshop on parameter estimation techniques. We look forward to your participation!

Best regards,

Kirk Dolan (Conference Chairperson), Jongeun Choi (co-chair),
Cara Brooks (co-chair) and James Beck (Honorary Chairperson)

Kirk Dolan, Chairperson IPS 2010
Associate Professor
Department of Food Science & Human Nutrition
Department of Biosystems & Agricultural Engineering
135 Trout Food Science Building, Michigan State University
dolank@msu.edu

Subject: Deadline Extended for Int'l Workshop on Optimization and
Inverse Problems
From: OIPE 2010 <oipe@ef12226-2.tu-sofia.bg>
Date: Wed, 31 Mar 2010

Dear Colleague,

Due to numerous requests from prospective authors, the deadline for the submission of 2-page digests for the XI-th International Workshop on Optimization and Inverse Problems in Electromagnetism OIPE 2010, to be held in Sofia, Bulgaria, from 14 to 18 September 2010, was extended to 30 April 2010 .

More information and online registration is available on the web-site of the Workshop at oipe.tu-sofia.bg

We do hope that this extended deadline will give the authors enough time for preparation and submission of high-quality 2-page digests.

Best regards,

Ivan Yatchev,
OIPE 2010 Chairman

Subject: Open Research Positions at Centre for Computational Imaging
From: Alejandro Frangi <alejandro.frangi@upf.edu>
Date: Wed, 31 Mar 2010

Open Research Positions in Barcelona - Spain
Centre for Computational Imaging and Simulation Technologies
in Biomedicine (CISTIB)

Kyle M Champley, Raymond R Raylman and Paul E Kinahan

The boundary control approach to inverse spectral theory
Sergei Avdonin and Victor Mikhaylov

Circular resistor networks for electrical impedance tomography with
partial boundary measurements L Borcea, V Druskin and A V Mamonov

Analytical and computational methods for transmission eigenvalues
David Colton, Peter Monk and Jiguang Sun

A posteriori error estimates for the adaptivity technique for the
Tikhonov functional and global convergence for a coefficient inverse
problem Larisa Beilina and Michael V Klibanov

Improving the Gauss--Newton convergence of a certain position
registration scheme C Toews and B Nelson

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/4>

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Inverse problems for Sturm--Liouville equations with boundary
conditions polynomially dependent on the spectral parameter
G Freiling and V A Yurko

The linear sampling method and energy conservation
R Aramini, G Caviglia, A Massa and M Piana

The inverse scattering transform and squared eigenfunctions for the
nondegenerate 3×3 operator and its soliton structure
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Model functions in the modified L-curve method---case study: the heat
flux reconstruction in pool boiling
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Guided Bayesian optimal experimental design
M R Khodja, M D Prange and H A Djikpesse

The multicomponent 2D Toda hierarchy: generalized matrix orthogonal polynomials, multiple orthogonal polynomials and Riemann--Hilbert problems

Carlos \Alvarez-Fern\andez, Ulises Fidalgo and Manuel Ma\~nas

The enclosure method for inverse obstacle scattering problems with dynamical data over a finite time interval

Masaru Ikehata

Two-dimensional near-field microwave holography

Maryam Ravan, Reza K Amineh and Natalia K Nikolova

The inverse resonance problem for CMV operators

Rudi Weikard and Maxim Zinchenko

Individual articles are free for 30 days following their publication on the web. This issue is available at:

<http://iopscience.iop.org/0266-5611/26/5>

Submitted by: Emma Avery, Senior Production Editor

IOP Publishing, Dirac House, Temple Back,

Bristol BS1 6BE England

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IPNet Digest Volume 17, Number 04 June 15, 2010

Today's Editor:

Patricia K. Lamm, Michigan State University

Today's Topics:

Workshop: Recent Trends in Applied Inverse Problems
Symposium: Chemnitz 2010 Symposium on Inverse Problems
Workshop: Novel Reconstruction Strategies in NMR and MRI
SIAM Conference: 2010 Annual Meeting
SIAM Conference: Computational Science & Engineering
SIAM Conference: Nonlinear Waves and Coherent Structures
Lecturership in Mathematics: Data Assimilation & Inverse Problems
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-Posed Problems
Table of Contents: International Journal of Tomography & Statistics

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Recent Trends in Applied Inverse Problems, 19-20 July 2010
From: Daniel Lesnic <amt5ld@maths.leeds.ac.uk>
Date: Thu, 29 Apr 2010

I am pleased to announce an international workshop on
"Recent Trends in Applied Inverse Problems"
to be held at the University of Birmingham between 19-20 July 2010.
The workshop is organised by Dr Tomas Johansson and more details,
including registration, are given at:
<http://web.mat.bham.ac.uk/inverse2010>

Best wishes,
Daniel Lesnic
Department of Applied Mathematics,
University of Leeds, Leeds LS2 9JT, UK.
e-mail: amt5ld@maths.leeds.ac.uk

Subject: Chemnitz Symposium on Inverse Problems 2010
From: Chemnitz Symposium on Inverse Problems <ip2010@tu-chemnitz.de>
Date: Tue, 8 Jun 2010

Dear Colleagues,

according to our first announcement from January 2010, we kindly remind you that the registration for the Chemnitz Symposium on Inverse Problems 2010 is still open.

Please note the following deadlines:

30 June, 2010: Submission of abstracts for contributed talks

15 July, 2010: Acceptance notification to authors

31 July, 2010: Registration for speakers (including room reservation) and deadline for early registration

31 August, 2010: Registration for other participants via www (including room reservation)

Online registration and further information is available under

<http://www.tu-chemnitz.de/mathematik/ip-symposium/>

If there are any questions, please do not hesitate to contact us by email

ip2010@tu-chemnitz.de or hofmannb@mathematik.tu-chemnitz.de

We are looking forward seeing you in Chemnitz!

Yours sincerely
Bernd Hofmann

Department of Mathematics
Chemnitz University of Technology
09107 Chemnitz, GERMANY
Phone +49 371 531 34125
Fax +49 371 531 22009

Subject: Workshop on Novel Reconstruction Strategies in NMR and MRI
From: Thorsten Hohage <hohage@math.uni-goettingen.de>
Date: Sun, 13 Jun 2010
To: Inverse Problems Network <ipowner@math.msu.edu>

Workshop on Novel Reconstruction Strategies in NMR and MRI:
Mathematics meets Magnetic Resonance
<http://www.math.uni-goettingen.de/nmr-mri-workshop/>

Time and Place:
Göttingen (Germany), September 9-11, 2010

Aims and Scope:

Several decades after the fundamental discoveries which opened the fields of nuclear magnetic resonance (NMR) spectroscopy and magnetic resonance imaging (MRI), both the underlying instrumentation and respective applications advanced to a fairly mature state, rendering NMR spectroscopy a key method for structural analysis of biomolecules and MRI one of the most important modalities for diagnostic

imaging. For MRI, recent developments indicate that further progress can rather be expected from novel mathematical reconstruction techniques than from further advances in technology. At the same time, the application of new mathematical approaches facilitates the recording of NMR spectra with higher spectral resolution and at less measurement time, especially for multi-dimensional NMR spectroscopy. As NMR and MRI share the same physical principles, there are many similarities between the mathematical tools used for their analysis.

The aim of this workshop is to foster interaction of researchers working in NMR, MRI, and regularization of ill-posed problems, starting with tutorials in each of these fields.

Topics include parallel imaging, undersampling strategies, compressed sensing, non-quadratic regularization, nonlinear inversion methods, diffusion-weighted imaging and fiber tractography, parametric as well as nonparametric reconstruction of spectra, and non-uniform sampling in the indirect time domain.

Confirmed Invited Speakers:

- * Andrew Alexander (Waisman Center, Madison, USA)
- * Felix Breuer (University of Würzburg, Germany)
- * Christian Clason (University of Graz, Austria)
- * Maxime Descoteaux (Sherbrooke University, Canada)
- * Jeffrey Hoch (University of Connecticut, USA)
- * Barbara Kaltenbacher (University of Graz, Austria)
- * Wiktor Koz'min'ski (University of Warsaw, Poland)
- * Michael Lustig (UC Berkeley, USA)
- * Vladislav Orekhov (University of Gothenburg, Sweden)
- * Ofer Pasternak (Harvard Medical School, USA)
- * Daniel Potts (TU Chemnitz, Germany)
- * Klaas Prüssmann (ETH Zürich, Switzerland)
- * Klaus Scheffler (University of Basel, Switzerland)
- * Carola Schönlieb (University of Cambridge, UK)
- * Nicole Seiberlich (University Hospitals, Cleveland, USA)
- * Karsten Tabelow (WIAS, Berlin, Germany)
- * Jeffrey Tsao (Novartis, Cambridge, USA)
- * Martin Uecker (BiomedNMR, Göttingen, Germany)

Registration and further information:

<http://www.math.uni-goettingen.de/nmr-mri-workshop/>
Thorsten Hohage: hohage@math.uni-goettingen.de
Christoph Ruegge: c.ruegge@math.uni-goettingen.de

Subject: Please Post - 2010 SIAM Annual Meeting (AN10)
From: Kirsten Wilden <Wilden@siam.org>
Date: Wed, 5 May 2010

Conference Name:

2010 SIAM Annual Meeting (AN10), being held jointly with the SIAM Conference on the Life Sciences (LS10)

Location:

The David L. Lawrence Convention Center
Pittsburgh, Pennsylvania, USA

Dates:

July 12-16, 2010

Invited Presentations:

Timothy J. Barth, NASA Ames Research Center
Carson Chow*, National Institutes of Health
Jesús A. De Loera, University of California, Davis
David Donoho, Stanford University
Charles Fefferman, Princeton University
Inez Fung, University of California, Berkeley
Leslie F. Greengard, Courant Institute of Mathematical Sciences, New York University
Olga Holtz, Technische Universität Berlin, Germany and University of California, Berkeley
Xiaoye Sherry Li, Lawrence Berkeley National Laboratory
Clas Jacobson, United Technologies Research Center
Tamara G. Kolda, Sandia National Laboratories
Steven E. Shreve, Carnegie Mellon University
Gigliola Staffilani, Massachusetts Institute of Technology
Kim-Chuan Toh, National University of Singapore
Gunther Uhlmann, University of Washington
Charles Wampler, General Motors Research and Development Center
*Joint speaker with the SIAM Conference on the Life Sciences

Prize Lectures:

AWM-SIAM Sonia Kovalevsky Lecture
Suzanne Lenhart, University of Tennessee

I. E. Block Community Lecture
Dmitri Tymoczko, Princeton University

Julian Cole Prize Lecture
John R. King, University of Nottingham, United Kingdom

W. T. and Idalia Reid Prize in Mathematics Lecture
John A. Burns, Virginia Polytechnic Institute & State University

John von Neumann Lecture
Bernd Sturmfels, University of California, Berkeley

Registration, preliminary program and hotel information are available:
<http://www.siam.org/meetings/an10/>

For additional information, contact the SIAM Conference Department at
meetings@siam.org.

Subject: SIAM Conference on Computational Science & Engineering (CSE11)
From: Kirsten Wilden <Wilden@siam.org>
Date: Wed, 5 May 2010

Conference Name:
SIAM Conference on Computational Science and Engineering (CSE11)

Location:
Grand Sierra Resort and Casino, Reno, Nevada, USA

Dates:
February 28 - March 4, 2011

The Call for Presentations for this conference is available at:
<http://www.siam.org/meetings/cse11/>

****Deadlines****

SUBMISSION DEADLINES
August 23, 2010: Minisymposium proposals August 30, 2010: Abstracts
for contributed and minisymposium speakers

TRAVEL FUND APPLICATION DEADLINE
September 13, 2010: SIAM Student Travel Award and Post-doc/Early
Career Travel Award Applications

PRE-REGISTRATION DEADLINE
January 31, 2011: Disconnect time is 4:00 PM EDT

HOTEL RESERVATION DEADLINE
February 7, 2011

For additional information, contact the SIAM Conference Department at
meetings@siam.org.

Subject: SIAM Nonlinear Waves and Coherent Structures
From: Kirsten Wilden <Wilden@siam.org>
Date: Thu, 20 May 2010

Conference Name:
SIAM Conference on Nonlinear Waves and Coherent Structures (NW10)

Location:
Sheraton Society Hill Hotel, Philadelphia, Pennsylvania, USA

Dates:
August 16-19, 2010

Invited Speakers:
Miguel Alcubierre, Universidad Nacional Autónoma de México, Mexico
Paul Bressloff, University of Oxford, United Kingdom

L.Mahadevan, Harvard University
Govind Menon, Brown University
Tom Silva, The National Institute of Standards and Technology
Marin Soljacic, Massachusetts Institute of Technology
Catherine Sulem, University of Toronto, Canada

Registration and the conference schedule are now available at
<http://www.siam.org/meetings/nw10/>.

PRE-REGISTRATION DEADLINE
July 19, 2010

HOTEL RESERVATION DEADLINE
July 19, 2010

For additional information, contact the SIAM Conference Department at
meetings@siam.org.

Subject: Lecturership in Mathematics: Data Assimilation, Inverse Problems
From: Simon Neil Chandler-Wilde <s.n.chandler-wilde@reading.ac.uk>
Date: Thu, 13 May 2010

LECTURESHIP IN MATHEMATICS: DATA ASSIMILATION AND INVERSE PROBLEMS
(Full-time, permanent, £33,600-£45,155 per annum, available from 1/1/2011)

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF READING

Closing date: 21 June 2010
Reference Number: LE10020

We are seeking an outstanding candidate at Lecturer level to strengthen our research activities in the mathematics of data assimilation and inverse problems. Mathematics at Reading has a strong track record of research activity and funding in data assimilation and inverse problems, and of strong interdisciplinary interactions through joint appointments between Mathematics and Meteorology, and our roles within the NERC National Centre for Earth Observation (NCEO) and within the University's Centre for Integrative Neuroscience and Neurodynamics. The successful candidate will join thriving research groups within mathematics and the wider University working on data assimilation and inverse problems. He/she will be expected to produce excellent research outputs, to initiate research grant applications, to supervise PhDs and postdocs, and to undertake teaching and administrative duties. To assist the person appointed to make an effective start to his/her research career at Reading, the post will carry reduced teaching and admin duties in the first eighteen months. The appointment may be subject to a probationary period in the first instance.

For further details and how to apply see
<https://www.reading.ac.uk/about/jobs/docs/LE10020.pdf>

On convergence of regularized modified Newton's method for nonlinear ill-posed problems Santhosh George

Irregular operator equations by iterative methods with undetermined reverse connection Anatoly Bakushinsky and Alexandra Smirnova

An inverse problem for a linearized model in the theory of combustion Fabrizio Colombo

A multi-step procedure for enriching limited two-dimensional acoustic far-field pattern measurements

Helene Barucq, Chokri Bekkey, and Rabia Djellouli

The above issue is now available online from Walter de Gruyter at:
<http://www.reference-global.com/toc/jiip/2010/18/2?ai=124&ui=34xi&af=T>

Subject: International Journal of Tomography & Statistics
From: "IJTS-owner@yahoogroups.com" <IJTS-owner@yahoogroups.com>
Date: Thu, 13 May 2010

International Journal of Tomography Statistics
ISSN 0973-7294 (Online) ISSN 0972-9976 (Print)
<http://www.ceserp.com/cp-jour/index.php?journal=ijts&page=index>
www.ceser.res.in/ijts.html

Dear Colleagues,

Table of Contents and Abstract available at:
Winter 2011, Volume 16, Number W11

or

<http://www.ceserp.com/cp-jour/index.php?journal=ijts&page=issue&op=current>

Sincerely Dr. Tanuja Srivastava Editor-in-Chief, International

----- end -----

IPNet Digest Volume 17, Number 05 July 31, 2010

Today's Editor: Patricia K. Lamm, Michigan State University

Today's Topics:

Canberra Symposium on Regularisation
International Conference on Inverse Problems in Engineering
International Conference on Inverse Problems
International Congress on Industrial and Applied Mathematics
SIAM Conference: Applications of Dynamical Systems
New Book on Biomedical Mathematics (Imaging, Inverse Problems)
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-Posed Problems
Table of Contents: IJCSM Special Issue on Inverse & Ill-Posed Problems
Table of Contents: Nonlinear Analysis: Modelling and Control

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Canberra Symposium on Regularisation
From: Markus Hegland <markus.hegland@anu.edu.au>
Date: Thu, 1 Jul 2010

Announcement:

Canberra Symposium on Regularisation
19 November - 24 November 2012
at the Australian National University

Organisation Committee:

R.S. Anderssen (cochair), M. Hegland (cochair), P. Leopardi,
S. Roberts, A. Irvine (admin)

Program Committee:

B. Hofmann (chair), M. Hanke-Bourgeois, D. N. Hao, M. Hegland,
P. Lamm, S. Pereverzyev, O.Scherzer, M. Yamamoto

Scientific Advisory Committee:

R.S. Anderssen (chair), G. Chavent, J. Cheng, H. Engl, C. Groetsch,
A. Louis, Z. Nashed, J. Zou, J. Zubelli

Scope and Purpose

Progress with the mathematical analysis of regularisation is fundamental to its utilization in the solution of ill-posed problems. Recent research has focussed on nonlinear regularisation

techniques which make use of the sparsity structure of the data, but also work on non-standard source conditions and convergence rates of linear regularisation methods. The aim of this meeting is to bring together researchers and students who have been actively involved with these recent mathematical developments to highlight the mathematics involved, to identify some of the future challenges, to exchange ideas on how to tackle such challenges and to form research collaborations. In addition, to encourage student participation, tutorial-style introductions to these new developments will be organized as a prelude to the symposium. In general terms, the theme of the meeting is the effect that the mathematical properties of the data and the regularisation techniques jointly have on the accuracy and efficiency of the associated information recovery.

Format

One week of talks, no parallel sessions, some longer (invited) some shorter (contributed) talks.

Audience

Around 100 participants from Australia and overseas, in particular, Germany, Austria, Japan, Vietnam and others.

Funding

Supported by the Centre for Mathematics and Its Applications of the ANU. Other support under negotiation.

URL

<http://maths.anu.edu.au/events/regularisation12/>

Contact

bob.anderssen@csiro.au
markus.hegland@anu.edu.au
bernd.hofmann@mathematik.tu-chemnitz.de

Submitted by: Markus Hegland, Senior Fellow
Centre for Mathematics and its Applications
Mathematical Sciences Institute
College of Physical Sciences, Dedman Building 27
The Australian National University, Canberra ACT 0200 Australia

Subject: Re: 2011 Int'l Conf. on Inverse Problems in Engineering(ICIPE7)
From: Alain Kassab <kassab@mail.ucf.edu>
Date: Tue, 20 Jul 2010

Announcing the 7th International Conference on Inverse Problems in Engineering (ICIPE) to be held at the University of Central Florida, in Orlando, Florida, USA, on May 4-6, 2011.

This is the seventh International Conference on Inverse Problems in Engineering: Theory and Practice (ICIPE) series, initiated in Palm Coast (USA) in 1993. Noteworthy features of all ICIPE meetings are their balanced focus on theory and applications (and, better yet, the

combination of both) and strive to provide an atmosphere aimed at maximizing opportunities for interactions between participants. The previous two ICIPE conferences were held in Paris (France) in 2008 and in Cambridge (UK) in July 2005.

Important Dates:

- Abstract Submission Deadline: September 3, 2010
- Abstract Acceptance Notification: October 1, 2010
- Paper (6 page) Submission Deadline: January 14, 2011
- Paper (6 page) Acceptance Notification: February 25, 2011
- Final Paper Submission Deadline: March 11, 2011

For more information visit the conference site (<http://www.icipe2011.org>) where we will be posting important updates or email us directly at secretariat@icipe2011.org if you have any specific questions.

The Conference Organizers
secretariat@icipe2011.org

Conference Chair: Alain Kassab; Conference Co-Chair: Eduardo Divo

Local organizing committee:

John Cannon (University of Central Florida, USA)
Eduardo Divo (University of Central Florida USA)
Kirk Dolan (Michigan State University, USA)
Jay Frankel (University of Tennessee, USA)
Alain Kassab (University of Central Florida, USA)
Faissal Moslehy (University of Central Florida UCF, USA)
Zuhair Nashed (University of Central Florida, USA)
Keith Woodbury (University of Alabama, USA)

International scientific committee:

Jean-Luc Battaglia (University of Bordeaux, France)
James Beck (Michigan State University, USA)
Ryzsard Bialecki (Silesian Technical University, Poland)
Marc Bonnet (Ecole Polytechnique, France)
Cara Brooks (Rose-Hulman Institute of Technology, USA)
Tadeusz Burczynski (Silesian Technical University, Poland)
John Cannon (University of Central Florida, USA)
Miguel Cerroloza (Central University of Venezuela, Venezuela)
Jongeeun Choi (Michigan State University, USA)
Marcel Colaco (Federal University of Rio de Janeiro, Brazil)
Andrei Constantinescu (Ecole Polytechnique, France)
Renato Cotta (Federal University of Rio de Janeiro, Brazil)
Kirk Dolan (Michigan State University, USA)
Kevin Dowding (Sandia National Labs, USA)
George Dulikravich (Florida International University, USA)
Ashley Emery (University of Washington, USA)
Colin Fox (University of Otago, New Zealand)
Jay Frankel (University of Tennessee, USA)
Breizada Gamez (University of Carabobo, Venezuela)
Alemdar Hassanov (Izmir University, Turkey)

Cheng-Hung Huang (National Cheng Kung University, Taiwan)
Derek Ingham (University of Leeds, UK)
Alexander Katsevich (University of Central Florida, USA)
Patricia Lamm (Michigan State University, USA)
German Larrazabal Serrano (University of Carrabobo, Venezuela)
Antonio Leitao (Federal University of Santa Catarina, Brazil)
Daniel Lesnic (University of Leeds, UK)
Toshiro Matsumoto (University of Nagoya, Japan)
Denis Maillet (Insitut National de Polytechnique de Lorraine, France)
Faissal Moslehy (University of Central Florida, USA)
Zuhair Nashed (University of Central Florida, USA)
Antonio Silva Neto (Instituto Politécnico, UERJ, Brazil)
Andrew Nowak (Silesian Technical University, Poland)
David Ojeda (University of Carabobo, Venezuela)
Helcio Orlande (Federal University of Rio de Janeiro, Brazil)
Darrell Pepper (University of Las Vegas, USA)
Keith Woodbury (University of Alabama, USA)
Luiz Wrobel (Brunel University, UK)
Nicholas Zabararas (Cornell University, USA)

Submitted by: Alain J. Kassab, Ph.D.
Professor and MMAE Graduate Program Coordinator
Mechanical, Materials, and Aerospace Engineering
University of Central Florida, Orlando, Florida 32816-2450
Email: kassab@mail.ucf.edu

Subject: Call for Abstracts, Int' Conf. on Inverse Problems
From: Benny <maychon@cityu.edu.hk>
Date: Tue, 27 Jul 2010

Title: International Conference on Inverse Problems
Date: December 13-17, 2010
Venue: City University of Hong Kong, Hong Kong
Website: <http://www6.cityu.edu.hk/ma/icip2010>

Interested authors are invited to submit a one-page abstract in pdf,
LaTeX/Tex or word format to

icip2010@cityu.edu.hk on or before November 1, 2010.

Objectives of the Conference:

Inverse problems have been studied intensively in the establishment of mathematical theories and its applications to various engineering disciplines. An increasing involvement with industrial research in related to medical tomography, non-destructive testing, and geophysics has been observed due to the recent new development in both the fundamental theory and computational method. To extend a stronger collaboration link among the universities of Asia-Pacific regions and worldwide leading researchers in inverse problems, a first international conference on inverse problems was held at City University of Hong Kong during January 9-12, 2002. More than 120 participants from Asian-American-European countries had attended the

conference with fruitful achievements. This series of conferences had also been held in Shanghai (2004 China), Hokkaido (2006 Japan), and Daejeon (2009 Korea). It is now an appropriate time to hold the fifth international conference on inverse problems in Hong Kong.

The main purpose of the "International Conference on Inverse Problems" is to address both theoretical (mathematics), applied (engineering) and development aspects of inverse problems. It is envisioned that the conference will draw researchers from the Asian, American and European scientific communities. The conference is intended to nurture Asian-American-European collaborations in this evolving interdisciplinary area. Additionally, one of the focuses of the conference is to strengthen the application of inverse problems to engineering disciplines.

Submitted by: Benny Y. C. Hon (Co-Chair for the Conference)
Professor, Department of Mathematics, City University of Hong Kong
Kowloon Tong, HKSAR, China
Email: Benny.Hon@cityu.edu.hk
Website: <http://www6.cityu.edu.hk/ma/people/ychon.html>

Subject: Call for Papers: ICIAM 2011
From: Dan P Cleary <Cleary@siam.org>
Date: Wed, 7 Jul 2010

Call for Papers:

ICIAM 2011
July 18 to 22, 2011
Vancouver, British Columbia, CANADA
www.iciam2011.com

Submissions are now being accepted online:
<http://meetings.siam.org/start.cfm?CONFCODE=ic11>

Minisymposia submission deadline: August 18, 2010

- * 27 international invited speakers who will collectively present an unparalleled snapshot of industrial and applied mathematics in the 21st century
- * 400 - 500 mini-symposia, contributed papers and poster sessions
- * 20 thematic tracks covering emerging topics in industrial and applied mathematics
- * 3000 international delegates from both academia and industry
- * Outstanding facilities at the new Vancouver Convention Centre, a harbour-front location covering four city blocks complete with breathtaking mountain and ocean views
- * A range of choices for accommodation from budget to four-star hotels ranging in price from \$59 to \$239
- * Countless local attractions and outdoor activities on the ocean or in the mountains

The organizers of the Congress, CAIMS, MITACS and SIAM, are committed to attracting over 3000 attendees - not only for the world-class program, but to visit beautiful Vancouver, with its incredible mountains, sparkling ocean and diverse cultures.

To be notified when registration opens, please sign up for e-lets at http://www.iciam2011.com/index.php?option=com_wrapper&view=wrapper&Itemid=10

Kind regards,

Dan Cleary
Project Communications, Moody's Mega Math Challenge
<http://M3Challenge.siam.org>
Marketing Communication Associate, SIAM

Subject: SIAM Conference on Applications of Dynamical Systems (DS11)
From: Kirsten Wilden <Wilden@siam.org>
Date: Tue, 13 Jul 2010

Subject: Call for Papers -
SIAM Conference on Applications of Dynamical Systems (DS11)

Conference Name:
SIAM Conference on Applications of Dynamical Systems (DS11)

Location:
Snowbird Ski and Summer Resort, Snowbird, Utah, USA

Dates:
May 22-26, 2011

The Call for Presentations for this conference is available at:
<http://www.siam.org/meetings/ds11/>

****Deadlines****

SUBMISSION DEADLINES
October 25, 2010: Minisymposium proposals
November 22, 2010: Abstracts for contributed and minisymposium speakers

TRAVEL FUND APPLICATION DEADLINE
November 8, 2010: SIAM Student Travel Award and Post-doc/Early Career
Travel Award Applications

PRE-REGISTRATION DEADLINE
April 25, 2011: Disconnect time is 4:00 PM EDT

HOTEL RESERVATION DEADLINE
April 22, 2011

For additional information, contact the SIAM Conference Department at meetings@siam.org.

Adjoint-based sampling methods for electromagnetic scattering
H Egger, M Hanke, C Schneider, J Schöberl and S Zaglmayr

Subspace-based optimization method for inverse scattering problems
with an inhomogeneous background medium Xudong Chen

On the imaging of thin dielectric inclusions buried within a half-space
Won-Kwang Park

Contrast-enhanced microwave imaging of breast tumors: a computational
study using 3D realistic numerical phantoms
J D Shea, P Kosmas, B D Van Veen and S C Hagness

Reduced-order estimation of nonstationary flows with electrical
impedance tomography A Lipponen, A Seppänen and J P Kaipio

Acceleration techniques for regularized Newton methods applied to
electromagnetic inverse medium scattering problems
Thorsten Hohage and Stefan Langer

Kriging-based generation of optimal databases as forward and inverse
surrogate models S Bilicz, M Lambert and Sz Gyimóthy

Application of a two-and-a-half dimensional model-based algorithm to
crosswell electromagnetic data inversion
Maokun Li, Aria Abubakar and Tarek M Habashy

Numerical solution of an inverse medium scattering problem with a
stochastic source Gang Bao, Shui-Nee Chow, Peijun Li and Haomin Zhou

A study on orthogonality sampling Roland Potthast

Recent developments of a monotonicity imaging method for magnetic
induction tomography in the small skin-depth regime
A Tamburrino, S Ventre and G Rubinacci

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/7>

Inverse Problems August 2010 Volume 26, Issue 8
Table of Contents

A sampling method for inverse scattering in the time domain
Q Chen, H Haddar, A Lechleiter and P Monk

Inverse problem of linear combinations of Gaussian convolution kernels
(deconvolution) and some applications to proton/photon dosimetry and
image processing W Ulmer

A two-component μ -Hunter-Saxton equation Dafeng Zuo

Integration of the Toda lattice with an integral-type source
Alberto Cabada and Gayrat Urazboev

Expected absolute value estimators for a spatially adapted
regularization parameter choice rule in L^1 -TV-based image
restoration Michael Hintermüller and M Monserrat Rincon-Camacho

Solving linear operator equations in Banach spaces non-iteratively by
the method of approximate inverse Thomas Schuster and Frank Schöpfer

Calculating tissue shear modulus and pressure by 2D log-elastographic methods
Joyce R McLaughlin, Ning Zhang and Armando Manduca

Inverse nodal problems for differential pencils on a star-shaped graph
Chuan-Fu Yang and Xiao-Ping Yang

Identification for a semilinear evolution equation in a Banach space
Alfredo Lorenzi and Ioan I Vrabie

Inverse diffusion theory of photoacoustics
Guillaume Bal and Gunther Uhlmann

An application of the reciprocity gap functional to inverse mixed
impedance problems in elasticity Christodoulos E Athanasiadis,
David Natroshvili, Vassilios Sevroglou and Ioannis G Stratis

An inverse problem for a wave equation with sources and observations
on disjoint sets Matti Lassas and Lauri Oksanen

Performance analysis of maximum likelihood methods for regularization
problems with nonnegativity constraints
P Favati, G Lotti, O Menchi and F Romani

A hybrid one-step inversion method for shear modulus imaging using
time-harmonic vibrations
Tae Hwi Lee, Chi Young Ahn, Oh In Kwon and Jin Keun Seo

Algorithm for the determination of a linear crack in an elastic body
from boundary measurements
Elena Beretta, Elisa Francini, Eunjoo Kim and June-Yub Lee

Stability estimate for an inverse problem for the electro-magnetic
wave equation and spectral boundary value problem Hajer Ben Joud

Amplitude calculations for 3D Gaussian beam migration using
complex-valued traveltimes Norman Bleistein and Samuel H Gray

Numerical approximation of null controls for the heat equation:
ill-posedness and remedies Arnaud Münch and Enrique Zuazua

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/8>

Submitted by Emma Avery, Senior Production Editor

Subject: J. Inverse and Ill-posed Problems Vol. 18, No. 3, July 2010
From: "reference-global@degruyter.com" <reference-global@degruyter.com>
Date: Thu, 15 Jul 2010

J. Inverse and Ill-posed Problems July 2010 Vol. 18, No. 3
Table of Contents

Inverse spectral problems for differential operators on arbitrary
compact graphs Vjacheslav Anatoljevich Yurko

Ill-posed quadratic optimization in Banach spaces Faker Ben Belgacem

Corrosion detection in a 2D domain with a polygonal boundary
Valeria Bacchelli, Alessandro Veneziani, and Sergio Vessella

On the problem of control the composition of material in the binary
alloy solidification process Anna G. Petrova

Identification of unknown terms in convolution integro-differential
equations in a Banach space Alfredo Lorenzi and Gianluca Mola

The above issue is now available online from Walter de Gruyter at:
<http://www.reference-global.com/toc/jiip/2010/18/3?ai=124&ui=34xi&af=T>

Subject: IJCSM, Vol.3, N1-2, (2010)
From: "Prof. Alexander G.Ramm" <ramm@math.ksu.edu>
Date: Fri, 25 Jun 2010

Int'l. J. Computer Science and Mathematics 2010 Vol. 3, N1-2
Table of Contents

Special Issue: Inverse and Ill-posed Problems
Guest Editor: A.G.Ramm

DSM of Newton type for solving operator equations $F(u) = f$ with
minimal smoothness assumptions on F N.S. Hoang, A.G. Ramm

Dynamical Systems Method for solving nonlinear equations with locally
Holder continuous monotone operators N.S. Hoang

Creating materials with a desired refraction coefficient: numerical
experiments Sapto W. Indratno, Alexander G. Ramm

Scattering by many small particles and creating materials with a
desired refraction coefficient M.I. Andriychuk, A.G. Ramm

Determining the temperature from Cauchy data in corner domains
B. Tomas Johansson

Inequalities between the fixed-energy phase shifts Miklos Horvath

On the interior transmission eigenvalue problem
Fioralba Cakoni, Andreas Kirsch

Zigzag nanoribbons in external electric and magnetic fields
Evgeny L. Korotyaev, Anton A. Kutsenko

Submitted by: Professor Alexander G.Ramm
Mathematics Department, Kansas State University,
Manhattan, KS 66506-2602, USA
email: ramm@math.ksu.edu

Subject: Table of Contents, Nonlinear Analysis: Modelling and Control
From: Romas Baronas <romas.baronas@mif.vu.lt>
Date: Wed, 23 Jun 2010

Nonlinear Analysis: Modelling & Control 2010 Vol. 15, No. 2
Table of Contents

On Duffing equation with random perturbations
A. Ambrazevicius, F. Ivanauskas, H. Pragarauskas

Unsteady natural convective power-law fluid flow past a vertical plate
embedded in a non-Darcian porous medium in the presence of a
homogeneous chemical reaction A.J. Chamkha, A.M. Aly, M.A. Mansour

A note on "Taylor-Couette flow of a generalized second grade fluid due
to a constant couple" C. Fetecau, A.U. Awan, M. Athar

Natural convection in a porous trapezoidal enclosure with
magneto-hydrodynamic effect M.A.H. Mamun, Md.T. Islam, Md.M. Rahman

Modeling the depletion of dissolved oxygen in a lake due to submerged
macrophytes A.K. Misra.

MHD mixed convection flow in a vertical lid-driven square enclosure
including a heat conducting horizontal circular cylinder with Joule
heating S. M.M. Rahman, M.A. Alim.

Modelling of Glycaemia dynamics: impact of physical exercises
D. Svitra, I. Basov, R. Vilkyte.

A family of estimators of population mean using multi-auxiliary
variate and post-stratification
Gajendra K. Vishwakarma, Housila P. Singh, Sarjinder Singh.

A free on-line edition is available at:
<http://www.lana.lt/journal/issues.php>

For a paper submission, please refer to <http://www.lana.lt/journal>

Submitted by: Dr. Romas Baronas, Journal Secretary,
Nonlinear Analysis: Modelling and Control
----- end -----

IPNet Digest Volume 17, Number 06 September 4, 2010

Today's Editors:

Patricia K. Lamm, Michigan State University
Cara D. Brooks, Michigan State University

Today's Topics:

Workshop on Numerical Methods for Optimal Control & Inverse Problems
SIAM Conference on Math. & Computational Issues in Geosciences
SIAM Conference on Optimization
SIAM Conference on Control and Its Applications
2011 Int'l Conferences (Guilin, China) on Signal Processing, etc.
Postdoc/Ph.D: Image-Based Computational Modeling of Anatomy/Physiology
Table of Contents: Inverse Problems

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Workshop on Numerical Methods for Optimal Control & Inverse Problems
From: "Kaltenbacher, Barbara <barbara.kaltenbacher@uni-graz.at>
Date: Tue, 3 Aug 2010

Workshop on Numerical Methods for Optimal Control and Inverse Problems
March 14 - 16, 2011
Technische Universität München
Faculty of Mathematics
Garching by Munich

web page:

<http://www.ma.tum.de/Mathematik/OCIP2011>

Invited speakers:

- * Martin Burger, University of Münster: Numerical Methods for 4D Molecular Imaging
- * Karl Kunisch, University of Graz: The Optimal and Minimal Invasion Optimal Control
- * René Pinnau, University of Kaiserslautern: Optimal Control Problems in Industry
- * Rolf Rannacher, University of Heidelberg: Parameter Estimation Problems in Image Processing

Organizers:

- * Barbara Kaltenbacher
- * Boris Vexler

* Barbara Wohlmuth

Subject: SIAM Conf. on Math. & Computational Issues in Geosciences (GS11)
From: "Nicole C. Erle" <erle@siam.org>
Date: Mon, 2 Aug 2010 11:46:21 -0400

Call for Papers Now Available!

Conference Name: SIAM Conference on Mathematical & Computational
Issues in the Geosciences (GS11)

Location: Hilton Long Beach & Executive Meeting Center, Long Beach,
California, USA

Dates: March 21-24, 2011

The Call for Papers for this conference is now available. Please
visit <http://www.siam.org/meetings/gs11/> for more information.

SUBMISSION DEADLINES

September 13, 2010: Minisymposium proposals

October 12, 2010: Abstracts for contributed and minisymposium speakers

TRAVEL FUND APPLICATION DEADLINE

September 27, 2010: SIAM Student Travel Award and Post-doc/Early
Career Travel Award Applications

Contact SIAM Conference Department at meetings@siam.org with any
questions about the conference.

Nicole Erle, CMP, Meeting Manager,
Society for Industrial and Applied Mathematics (SIAM)
3600 Market St, 6th Floor, Philadelphia, Pa 19104-2688,
215-382-9800 x 305

Subject: SIAM Conference on Optimization (OP11)
From: "Nicole C. Erle" <erle@siam.org>
Date: Mon, 2 Aug 2010

Call for Papers Now Available!

Conference Name: SIAM Conference on Optimization (OP11)

Location: Darmstadtium Conference Center, Darmstadt, Germany

Dates: May 16-19, 2011

The Call for Papers for this conference is now available. Please
visit <http://www.siam.org/meetings/op11/> for more information.

SUBMISSION DEADLINES

October 18, 2010: Minisymposium proposals
November 15, 2010: Abstracts for contributed and minisymposium speakers

TRAVEL FUND APPLICATION DEADLINE

November 1, 2010: SIAM Student Travel Award and Post-doc/Early Career
Travel Award Applications

Contact SIAM Conference Department at meetings@siam.org with any
questions about the conference.

Nicole Erle, CMP, Meeting Manager,
Society for Industrial and Applied Mathematics (SIAM)
3600 Market St, 6th Floor, Philadelphia, Pa 19104-2688
215-382-9800 x 305

Subject: SIAM Conference on Control and Its Applications (CT11)
From: Kirsten Wilden <Wilden@siam.org>
Date: Mon, 30 Aug 2010

Call for Papers

Conference Name: SIAM Conference on Control & Its Applications (CT11)

This conference is sponsored by the SIAM Activity Group on Control and
Systems Theory (<http://www.siam.org/activity/cst/>) and is a Satellite
Meeting of ICIAM 2011 (<http://www.iciam2011.com/>).

Location: Hyatt Regency Baltimore, Baltimore, Maryland, USA

Dates: July 25-27, 2011

The Call for Presentations for this conference is available at:
<http://www.siam.org/meetings/ct11/>

SUBMISSION DEADLINES

January 3, 2011: Minisymposium proposals
January 31, 2011: Abstracts for contributed and minisymposium speakers

TRAVEL FUND APPLICATION DEADLINE

January 17, 2011: SIAM Student Travel Award and Post-doc/Early Career
Travel Award Applications

PRE-REGISTRATION DEADLINE

June 27, 2011: Disconnect time is 4:00 PM EDT

HOTEL RESERVATION DEADLINE

June 27, 2011

For additional information, contact the SIAM Conference Department at
meetings@siam.org.

Subject: NCIS-CMSP2011--CALL FOR PAPERS
From: NCIS-CMSP2011 <wism-aici2009@shiep.edu.cn>
Date: Tue, 24 Aug 2010

The 2011 International Conference on Network Computing and Information Security (NCIS'11)

The 2011 International Conference on Multimedia and Signal Processing (CMSP'11)

14-15 May 2011, Guilin, China

Submission Deadline: 10 November 2010

<http://ncis-cmsp2011.gxnu.edu.cn>

Call for Papers

The 2011 International Conference on Network Computing and Information Security (NCIS'11) and the 2011 International Conference on Multimedia and Signal Processing (CMSP'11) will be jointly held at Guilin, China in 14-15 May 2011.

NCIS'11-CMSP'11 aims to provide a high-level international forum for scientists and researchers to present the state of the art of Network Computing, Information Security, Multimedia, Image, Video and Signal Processing, with their applications for addressing world problems of various kinds. NCIS'11-CMSP'11 is multi-disciplinary in which a wide range of theory and methodologies are being investigated and developed to tackle complex and challenging problems.

All accepted papers will appear in conference proceedings published by the Journal of Computational Information Systems and the IEEE-CS, respectively.

All accepted papers at NCIS'11-CMSP'11 are indexed by EI and ISTP.

For more information, visit the conference web page or email the secretariat at ncis-cmsp2011@mailbox.gxnu.edu.cn.

Join us at this major event in scenic Guilin !!!
2010-07-15 ncis-cmsp2011

Subject: Image-based computational modeling of anatomy and physiology: postdoc and phd studentships in Barcelona
From: Alejandro Frangi <alejandro.frangi@upf.edu>
Date: Sat, 28 Aug 2010

Centre for Computational Imaging and Simulation Technologies in Biomedicine (CISTIB)

Open positions for postdoctoral and graduate students

The Centre for Computational Imaging and Simulation Technologies in Biomedicine (CISTIB) belongs to the Universitat Pompeu Fabra (www.upf.edu), in Barcelona. This is a research university top-ranked in Spain in terms of scientific output and the sole Spanish university within the top 100 worldwide in computer science (www.arwu.org).

CISTIB focuses on algorithmic and applied research in the area of computational imaging, modeling and simulation. CISTIB is led by Dr. Alejandro Frangi and is composed of 55 members working in different areas of medical image segmentation, statistical shape analysis, pattern recognition and image-based personalized computational electro-mechanics and fluid dynamics, and modeling of virtual interventions with endovascular and cardiac rhythm management devices. The centre hosts faculty members from the Universitat Pompeu Fabra as well as post-doctoral researchers, PhD Students and scientific software developers forming a cross-disciplinary team of biomedical engineers, computer scientists, electrical engineers, mechanical engineers, physicists, mathematicians and biologists. The lab hosts members from over 20 nationalities from Europe, Asia and Americas and the working language is English.

The main objective of CISTIB is to contribute to the development of technologies for advanced screening, diagnostics, interventional guidance and therapy planning of cardio- and neurovascular diseases as well as growing activity in the musculo-skeletal system. Converging technologies such as computational imaging, computational physiology and virtual implantation of medical devices are integrated with state of the art multimodal acquisition systems to achieve an enhanced interpretation of human physiology and pathology and supply integrative approaches for in silico medical device customization, optimization and image-based efficacy assessment. Core technologies include spatial and temporal image segmentation, non-rigid image registration, multimodal image fusion, pattern recognition, statistical shape analysis, multi-view geometry, image-based tissue property estimation, tissue deformation quantification, computational geometry, image-based mesh generation, computational fluid dynamics and electro-mechanical simulation.

CISTIB fosters basic and applied research and promotes technology transfer to industry. It participates to a number of national and international research projects funded by the Spanish Ministry of Education, the Spanish Ministry of Innovation & Science and the European Commission, and holds collaborations with several national and international companies. CISTIB maintains also very close cooperation with clinical centers at the local level and worldwide and has a strong clinically-oriented translational vision.

CISTIB is part of the CIBER-BBN (Centro de Investigación Biomédica en Red en Bioingeniería, Biomateriales y Nanomedicina, www.ciber-bbn.es), a consortium financed by Instituto de Salud Carlos III - Spanish Ministry of Health - whose goals are to encourage synergies between national and international research institutions and promote

translation of research to industry. CISTIB is an official consolidated quality research group funded by the Departament d'Universitats, Recerca i Societat de la Informació (DURSI) and is also integrated in the Technological Innovation Network (Tecnio Network), of the Generalitat de Catalunya.

Details:

Open Post-Doc Fellowships in Barcelona - Spain:

http://www.tecn.upf.es/~afrangi/opencalls_researchers.htm

Open PhD Studentships in Barcelona - Spain

http://www.tecn.upf.es/~afrangi/opencalls_phdstudents.htm

Subject: Inverse Problems, volume 26, issue 9, September 2010

From: Emma Avery <Emma.Avery@iop.org>

Date: Tue, 17 Aug 2010

Inverse Problems September 2010 Volume 26, Issue 7
Table of Contents

Nonnegative image reconstruction from sparse Fourier data: a new deconvolution algorithm S Bonettini and M Prato

Inverse scattering method based on contour deformations using a fast marching method M Eskandari and R Safian

An inverse radiative transfer model of the vegetation canopy based on automatic differentiation
M Vo{\ss}beck, M Clerici, T Kaminski, T Lavergne, B Pinty and R Giering

On the reconstruction of inclusions in a heat conductive body from dynamical boundary data over a finite time interval
Masaru Ikehata and Mishio Kawashita

Integral equation models for thermoacoustic imaging of acoustic dissipative tissue Richard Kowar

Logarithmic stability in determination of a 3D viscoelastic coefficient and a numerical example Maya de Buhan and Axel Osses

Solutions of matrix NLS systems and their discretizations: a unified treatment Aristophanes Dimakis and Folkert M\"uller-Hoissen

Reconstruction from a sampling of circle integrals in $SO(3)$
Victor P Palamodov

Simultaneous identification of electric permittivity and magnetic permeability Hui Feng, Daijun Jiang and Jun Zou

Detection of a moving rigid solid in a perfect fluid
Carlos Conca, Muslim Malik and Alexandre Munnier

On an inverse problem for anisotropic conductivity in the plane

Gennadi Henkin and Matteo Santacesaria

Integral equations for shape and impedance reconstruction in corrosion detection Fioralba Cakoni, Rainer Kress and Christian Schuft

Cross rules of some extrapolation algorithms
Claude Brezinski, Yi He, Xing-Biao Hu and Jian-Qing Sun

Uniqueness and stability for the inverse medium problem with internal data Faouzi Triki

Differential-difference regularization for a 2D inverse heat conduction problem Zhi Qian and Qiang Zhang

A duality-based method of quasi-reversibility to solve the Cauchy problem in the presence of noisy data L Bourgeois and J Dard\`e

ERRATUM

The boundary control approach to inverse spectral theory
Sergei Avdonin and Victor Mikhaylov

CORRIGENDUM

Inversion of a new circular-arc Radon transform for Compton scattering tomography M K Nguyen and T T Truong

Individual articles are free for 30 days following their publication on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/9>

Submitted by Emma Avery, Senior Production Editor
----- end -----

Today's Editors:

Patricia K. Lamm, Michigan State University
Cara D. Brooks, Michigan State University

Today's Topics:

Conference: Applied Inverse Problems (AIP-2011)
Postdocs: High Performance Computing and Computer Vision
Positions: Scientific Computing, Inverse Problems
Special NLAA Issue: Inverse Problems, in Honor of Biswa Datta
Table of Contents: Inverse Problems
Table of Contents: Nonlinear Analysis: Modelling and Control

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: AIP-2011 Conference on Applied Inverse Problems
From: William Rundell <rundell@math.tamu.edu>
Date: Mon, 20 Sep 2010

Conference on Applied Inverse Problems (AIP-2011)

1. AIP 2011 will take place May 23-27 2011
in College Station, Texas.

URL: <http://aipc.tamu.edu/>

2. Plenary Speakers are:

- * Simon Arridge - University College London
- * Gang Bao - Michigan State University
- * Heinz Engl - University of Vienna
- * Elisa Francini - University of Florence
- * Peter Hall - University of Melbourne
- * Hyeonbae Kang - Inha University Korea
- * Andreas Kirsch - University of Karlsruhe
- * Peter Kuchment - Texas A&M University
- * Alison Malcolm - MIT
- * Maher Moakher - ENIT Tunisia
- * Lassi Paivarinta - University of Helsinki
- * Gunther Uhlmann - University of Washington

3. Call for Minisymposia for AIP 2011:

To submit, organizers should send an e-mail to aipc@math.tamu.edu containing the following:

- * The title of the minisymposia
- * The name of the organizer(s)
- * A list of confirmed speakers (4 or 8)

The deadline for submission is November 15, 2010.

4. Call for contributed papers:

To submit, organizers should send an e-mail to aipc@math.tamu.edu containing:

- * The title of the talk
- * Authors of the talk and the name of the presenter
- * A brief abstract. (detailed enough for the organizers to place the talk in the correct session.

The deadline for submission is January 31, 2011.

Subject: Postdoc positions in High Performance Computing, Computer Vision
From: Steven Damelin <damelin@georgiasouthern.edu>
Date: Thu, 23 Sep 2010

Postdoc positions in High Performance Computing and Computer Vision

As part of a grant through the Center for High Performance Computing in Cape Town (till 2013), my group in High Performance Computing and Computer Vision at the University of the Witwatersrand is seeking to appoint postdocs who are interested in working on a wide range of problems with Graduate Students related to High Performance Computing, Computer Vision and Imaging.

Interested Graduate students may also apply.

Some information on the grant may be obtained via my webpage:

<http://math.georgiasouthern.edu/~damelin/>

contact email: steve.damelin@gmail.com

Subject: job advertisement to IP-NET digest
From: Ville Kolehmainen <ville.kolehmainen@uef.fi>
Date: Fri, 1 Oct 2010

EARLY STAGE RESEARCHER POSITIONS IN SCIENTIFIC COMPUTING

University of Eastern Finland
Department of Physics and Mathematics (Kuopio campus)

The University of Joensuu and the University of Kuopio merged to

constitute the University of Eastern Finland, which began its operations on 1 January 2010. The University of Eastern Finland seeks to be an internationally recognised research and teaching university, which is among the top three most significant universities in Finland and among the leading 200 universities in the world.

The Inverse Problems Group (IPG) at the University of Eastern Finland is affiliated with the Center of Excellence in Inverse Problems Research (Academy of Finland). The IPG is led by Prof. Jari P. Kaipio, and it currently consists of 10 senior and postdoc researchers and 8 PhD students. The group will hire new doctoral students in 2011. All PhD projects are related to scientific computing, either to the stable forward, or the unstable inverse problems. With all projects, part of the work is to be carried out while visiting one or several of the international partners. The salary will be placed on levels 1-4 of the job demands level chart for teaching and research personnel in the Salary System for Finnish Universities. The duration of the position can be up to four years, beginning on 1 January 2011. However, with most projects, the starting times are negotiable, and the style and contribution can be adjusted somewhat to match the students' strengths.

We invite prospective candidates (persons with a relevant MSc degree or students graduating in the near future) to apply for one or several of the following projects

- 1) Stochastic boundary models for inverse problems induced by PDEs
- 2) Development of advanced modelling for diffuse optical tomography
- 3) Electrical capacitance tomography imaging of concrete
- 4) Optimal control in geophysical tomographic problems
- 5) Electrical impedance tomography for non-invasive measurement of occupational voice loading

The application with the following documents should be sent or delivered to the Registry Office of the University of Eastern Finland, Kuopio Campus, P.O.B. 1627, 70211 Kuopio, Finland (street address: Yliopistonranta 1 E, Snellmania) or Joensuu Campus, P.O.B. 111, 80101 Joensuu, Finland (street address: Yliopistokatu 2, Aurora).

The deadline for applications is October 29, 2010 (at 3.00 pm).

- 1) Cover letter indicating which project(s) are addressed,
- 2) Short CV,
- 3) Scanned copies of relevant diplomas and transcripts of academic records.
The diplomas and transcripts should be in English or Finnish and the grading system should be described
- 4) Names and contact information of two referees

For more information, see

<http://physics.uku.fi/research/IP/Announcement2010.pdf>

All enquiries related to the PhD projects: Ville.Kolehmainen@uef.fi

Submitted by: Ville Kolehmainen, Ph.D., Docent, Academy Research Fellow

Department of Physics and Mathematics, University of Eastern Finland
P.O.Box 1627, 70211 Kuopio, Finland

Subject: Special Issue: Inverse Problems, in Honour of Biswa Datta
From: Eric <eric.chu@monash.edu>
Date: Tue, 7 Sep 2010

NLAA Special Issue in Inverse Problems in Science and Industry, In
Honour of Biswa Datta

Call for Papers:

Special Issue in Inverse Problems in Science and Industry, dedicated
to Biswa Datta

We are pleased to announce a special issue of Numerical Linear Algebra
with Applications in Inverse Problems in Science and Industry,
dedicated to Biswa Datta.

All papers submitted must meet the publication standards of Numerical
Linear Algebra with Applications and will be subject to the normal
refereeing procedure. In particular, we encourage papers related to
Biswa's work areas, including

- inverse problems in science and industry,
- numerical algorithms for control, systems, and signal processing,
- active vibration control,
- model updating,
- numerical linear algebra in applications,

but other papers involving inverse problems and within the scope of
the journal are most welcome.

The deadline for submission of papers is February 28, 2011.

Please submit your papers directly via the online submission system
for NLAA (<http://mc.manuscriptcentral.com/nla>), mentioning that the
paper is for a special issue. Please give also the special issue title
(Special issue on Inverse Problems dedicated to Biswa
Datta).

Guidelines regarding paper style, which is not compulsory
until a paper is accepted for publication, can be found at
<http://www3.interscience.wiley.com/journal/5957/home/ForAuthors.html>

Guest editors:

Eric King-wah Chu
School of Mathematical Sciences
Monash University
VIC 3800, Australia
eric.chu@monash.edu

Pyramidal resistor networks for electrical impedance tomography with partial boundary measurements
L Borcea, V Druskin, A V Mamonov and F Guevara Vasquez

Connection formulae for asymptotics of solutions of the degenerate third Painlevé equation: II A V Kitaev and A Vartanian

Joint myopic deconvolution F Benvenuto and A Ferrari

Stability analysis of the inverse transmembrane potential problem in electrocardiography
Martin Burger, Kent-Andr e Mardal and Bj orn Fredrik Nielsen

Inverse eigenvalue problems for perturbed spherical Schr odinger operators Aleksey Kostenko, Alexander Sakhnovich and Gerald Teschl

Stable determination of the electromagnetic coefficients by boundary measurements Pedro Caro

Inversion of the circular Radon transform on an annulus
Gaik Ambartsoumian, Rim Gouia-Zarrad and Matthew A Lewis

Effective solution of nonlinear subsurface flow inverse problems in sparse bases Lianlin Li and Behnam Jafarpour

Discretization of variational regularization in Banach spaces
Christiane P oschl, Elena Resmerita and Otmar Scherzer

Iterative methods for the split feasibility problem in infinite-dimensional Hilbert spaces Hong-Kun Xu

Individual articles are free for 30 days following their publication on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/10>

Submitted by Emma Avery, Senior Production Editor
E-mail: emma.avery@iop.org

Subject: Nonlinear Analysis: Modelling and Control
From: Romas Baronas <romas.baronas@mif.vu.lt>
Date: Fri, 24 Sep 2010

Nonlinear Analysis: Modelling and Control, 2010 Vol. 15, No. 3
Table of Contents

Effect of radiation with temperature dependent viscosity and thermal conductivity on unsteady a stretching sheet through porous media
M.M.M. Abdou

The effect of environmental tax on the survival of biological species in a polluted environment: a mathematical model M. Agarwal, S. Devi

Effects of pressure work on natural convection flow around a sphere with radiation heat loss T. Akhter, M.A. Alim

Stability analysis in a delayed SIR epidemic model with a saturated incidence rate A. Kaddar

Asymptotic solution of the mathematical model of nonlinear oscillations of absolutely elastic inextensible weightless string
A. Krylovas, O. Lavcel-Budko, P. Miskinis

Estimation of the finite population covariance using calibration
A. Plikusas, D. Pumputis

A semi-analytical solution of micro polar flow in a porous channel with mass injection by using differential transform method
M.M. Rashidi, S.A. Mohimani Pour, N. Laraqi

Numerical solving of coupled systems of parabolic and ordinary differential equations V. Skakauskas, P. Katauskis

Dynamical complexities in a tri-trophic hybrid food chain model with Holling type II and Crowley-Martin functional responses
R.K. Upadhyay, S.N. Raw, V. Rai

For a paper submission, please refer to <http://www.lana.lt/journal>

A free on-line edition is available at:
<http://www.lana.lt/journal/issues.php>

Submitted by: Dr. Romas Baronas, Journal Secretary,
Nonlinear Analysis: Modelling and Control
----- end -----

Today's Editors:

Patricia K. Lamm, Michigan State University
Cara D. Brooks, Michigan State University

Today's Topics:

Call for Papers: International Conference on Inverse Problems
Update: Int'l Congress on Industrial and Applied Mathematics
New Book: Super-resolution Imaging
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-Posed Problems

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

[Note that in the next news item is a reminder of a deadline that passed yesterday. Please contact organizers directly to see if an extension of the deadline is possible. -Ed.]

Subject: Reminder on Call for Papers
From: 'maychon' <Benny.Hon@cityu.edu.hk>
Date: Thu, 21 Oct 2010

Subject: Reminder on Call for Paper
Title: International Conference on Inverse Problems
Venue: City University of Hong Kong, Hong Kong
Date: December 13-17, 2010
Website: <http://www6.cityu.edu.hk/ma/icip2010>

Interested authors are invited to submit a one-page abstract in pdf, LaTeX/Tex or word format to

icip2010@cityu.edu.hk on or before November 1, 2010.

Objectives of the Conference:

Inverse problems have been studied intensively in the establishment of mathematical theories and its applications to various engineering disciplines. An increasing involvement with industrial research in related to medical tomography, non-destructive testing, and geophysics has been observed due to the recent new development in both the fundamental theory and computational method. To extend a stronger collaboration link among the universities of Asia-Pacific regions and worldwide leading researchers in inverse problems, a first

international conference on inverse problems was held at City University of Hong Kong during January 9-12, 2002. More than 120 participants from Asian-American-European countries had attended the conference with fruitful achievements. This series of conferences had also been held in Shanghai (2004 China), Hokkaido (2006 Japan), and Daejeon (2009 Korea). It is now an appropriate time to hold the fifth international conference on inverse problems in Hong Kong.

The main purpose of the "International Conference on Inverse Problems" is to address both theoretical (mathematics), applied (engineering) and development aspects of inverse problems. It is envisioned that the conference will draw researchers from the Asian, American and European scientific communities. The conference is intended to nurture Asian-American-European collaborations in this evolving interdisciplinary area. Additionally, one of the focuses of the conference is to strengthen the application of inverse problems to engineering disciplines.

Thanks and with Best Regards,
Benny Y. C. Hon, Ph.D.
Professor
Department of Mathematics
City University of Hong Kong
Kowloon Tong, HKSAR, China
Tel: (852) 3442 8675
Fax: (852) 3442 0250
Email: Benny.Hon@cityu.edu.hk
Website: <http://www6.cityu.edu.hk/ma/people/yhon.html>

Subject: ICIAM 2011 eNewsletter - October 2010
From: Bruce Bailey <Bailey@siam.org>
Date: Tue, 5 Oct 2010

After many years of planning, we are now less than a year away from ICIAM 2011! Here are some highlights and updates:

-Thematic minisymposia to be presented at ICIAM 2011, encompassing over 20 areas in applied and industrial mathematics, have been announced. Check out the entire list (<http://tinyurl.com/2ez4zr7>)!

-Submissions for contributed minisymposia were due October 18th with decisions to be expected by November 8. Make sure to check the ICIAM 2011 website (<http://www.iciam2011.com/>) often to learn more about the speakers and minisymposia taking place. Abstracts are being added daily.

-We now have ICIAM 2011 travel subsidies available for students and early career researchers in the US, mathematical sciences students in Canada, and delegates from developing nations. Please check the travel subsidies page (<http://tinyurl.com/36vdvdf>) for further information.

-If you have questions about visas to attend ICIAM— including whether

or not you need one—visit the travel subsidies and visas section of the website (<http://tinyurl.com/3y29h5c>). There you will find links to important information about visa applications, processing times, and locations of Canadian visa offices around the world.

-Keep checking the ICIAM 2011 website (<http://www.iciam2011.com/>) for new information, and be sure to check your mailbox! Over the past month, ICIAM 2011 posters have gone out to member societies and scientists around the world. If you haven't already received one, you can request a copy at info@iciam2011.com.

-Keep up to date with ICIAM deadlines, announcements and reminders by signing up for e-lets (<http://tinyurl.com/2d3cy7k>), or by following ICIAM 2011 on Twitter (<http://twitter.com/iciam2011>).

We look forward to seeing you in Vancouver!

Arvind Gupta, President, ICIAM 2011, CEO & Scientific Director, MITACS

Subject: New Book: Super-resolution imaging
From: Peyman Milanfar <milanfar@ee.ucsc.edu>
Date: Tue, 12 Oct 2010

New Book: Super-resolution Imaging, Peyman Milanfar, Editor

This book functions as the definitive overview of the field of super-resolution imaging. Written by the leading researchers in the field of image and video super-resolution, it surveys the latest state-of-the-art techniques in super-resolution imaging. Each detailed chapter provides coverage of the implementations and applications of super-resolution imaging. Its 14 sections span a wide range of modern super-resolution imaging techniques and includes variational, Bayesian, feature-based, multi-channel, learning-based, locally adaptive, and nonparametric methods. It discusses, among others, medical, military, and remote-sensing applications. The book can be used as a reference, a basis for short-courses on the subject, or as part of a graduate course on digital image processing.

- * Hardcover: 490 pages
- * Publisher: CRC Press; 1 edition (September 28, 2010)
- * ISBN-10: 1439819300
- * <http://www.amazon.com/gp/product/1439819300/>

Subject: Inverse Problems, Volume 26, Issue 11, November 2010
From: Emma Avery <Emma.Avery@iop.org>
Date: Fri, 22 Oct 2010

Inverse Problems November 2010 Volume 26, Issue 11
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Regularization of ill-posed Mumford--Shah models with perimeter

penalization Ronny Ramlau and Wolfgang Ring

Global uniqueness in determining polygonal periodic structures with a minimal number of incident plane waves

Johannes Elschner and Guanghui Hu

Photoacoustic tomography in absorbing acoustic media using time reversal

Bradley E Treeby, Edward Z Zhang and B T Cox

Inverse spectral problem for a string equation with partial information

Guangsheng Wei and Hong-Kun Xu

Variational data assimilation to estimate the velocity in the wave equation

J\er\^ome Fehrenbach, Jennifer Oudry and Laurent Sandrin

A stable recovering of dipole sources from partial boundary measurements

A El-Badia and M Farah

A posteriori error estimates in a globally convergent FEM for a hyperbolic coefficient inverse problem

M Asadzadeh and L Beilina

A boundary value transformation for an inverse source problem with point sources

Dmitry Glotov

Nuclear norm regularization with a low-rank constraint for matrix completion

Hui Zhang, Lizhi Cheng and Wei Zhu

Finite-element contrast source inversion method for microwave imaging

Amer Zakaria, Colin Gilmore and Joe LoVetri

Singular value decomposition for the truncated Hilbert transform

A Katsevich

An inverse scattering transform for the lattice potential KdV equation

Samuel Butler and Nalini Joshi

Illumination analysis of wave-equation imaging with curvelets

Shen Wang, Maarten V de Hoop and Bj\orn Ursin

Generalized Bregman distances and convergence rates for non-convex regularization methods

Markus Grasmair

Sparse channel separation using random probes

Justin Romberg and Ramesh Neelamani

Point source reconstruction principle of linear inverse problems

Yasushi Terazono, Norio Fujimaki, Tsutomu Murata and Ayumu Matani

Two regularization methods for solving a Riesz--Feller space-fractional backward diffusion problem

G H Zheng and T Wei

A three-dimensional muscle activity imaging technique for assessing pelvic muscle function

Yingchun Zhang, Dan Wang and Gerald W Timm

On the solvability and approximate solution of a two-dimensional coefficient inverse problem for a transport-like equation
Zekeriya Ustaoglu, Bayram Heydarov and Serif Amirov

Confidence bands for inverse regression models
Melanie Birke, Nicolai Bissantz and Hajo Holzmann

Joining RDC data from flexible protein domains Luca Sgheri

Individual articles are free for 30 days following their publication on the web. This issue is available at:

<http://iopscience.iop.org/0266-5611/26/11>

Submitted by Emma Avery, Senior Production Editor

Subject: J. Inverse and Ill-posed Problems, Vol. 18, No. 4
From: "reference-global@degruyter.com" <reference-global@degruyter.com>
Date: Thu, 21 Oct 2010

J. Inverse and Ill-posed Problems October 2010 Vol. 18, No. 4
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An inverse nodal problem for integro-differential operators
Yulia V. Kuryshova and Chung-Tsun Shieh

Reconstruction of pressure velocities and boundaries of thin layers in thinly-stratified layers A. L. Karchevsky

Restoration of tape matrices with the help of the spectral data
B. E. Kanguzhin

On the inversion formulas of Pestov and Uhlmann for the geodesic ray transform Venkateswaran P. Krishnan

On regularization method for numerical inversion of the Laplace transforms computable at any point on the real axis V. V. Kryzhniy

Discrepancy principle for generalized GN iterations combined with the reverse connection control
Anatoly Bakushinsky and Alexandra Smirnova

Recovering memory kernels in parabolic transmission problems in infinite time intervals: the non-accessible case
Jaan Janno and Alfredo Lorenzi

The above issue is now available online from Walter de Gruyter at:
<http://www.reference-global.com/toc/jiip/2010/18/4?ai=124&ui=34xi&af=T>
----- end -----

Today's Editors:

Patricia K. Lamm, Michigan State University
Cara D. Brooks, Michigan State University

Today's Topics:

Update: Applied Inverse Problems Conference (AIP 2011)
Update: Int'l Congress on Industrial & Applied Mathematics (ICIAM 2011)
Calderon Prize: Distinguished Contributions to Inverse Problems Field
Journals: Free Access to De Gruyter Journals in 2010
Table of Contents: Inverse Problems
Table of Contents: Nonlinear Analysis: Modelling & Control

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: AIP 2011
From: William Rundell <rundell@math.tamu.edu>
Date: Sun, 28 Nov 2010

Applied Inverse Problems Conference (AIP 2011)
May 23-27, 2011
College Station, Texas, USA

Please note:

Deadline for Minisymposia is December 15
see <http://aipc.tamu.edu> for details

Subject: ICIAM 2011 e-Newsletter - November 2010
From: Bruce Bailey <Bailey@siam.org>
Date: Tue, 30 Nov 2010

Dear friends,

There has been so much activity surrounding ICIAM 2011 (Vancouver, BC, Canada from July 18 -- 22, 2011) that it is difficult to know where to start.

Most importantly, registration is now live!

www.iciam2011.com/goto/registration

Early bird rates will be available until February 28, 2011 so register soon. We have also negotiated excellent rates suitable for any budget at hotels and hostels in Vancouver. For more information please visit <http://tinyurl.com/28vea4e>.

All contributed minisymposia taking place at the Congress have been confirmed. You can find the list on the ICIAM website (<http://tinyurl.com/25jdeux>).

I would like to draw your attention to a number of travel subsidies (<http://tinyurl.com/3y29h5c>) available to young US researchers, Canadian mathematical sciences students and participants from developing nations. We encourage you to review these subsidies to investigate your eligibility. In addition, Canada does require visas or permits from individuals from many countries and the turnaround times vary. Please visit this page (<http://tinyurl.com/67uxjc>) on the Government of Canada website for complete information.

To compliment your time in Vancouver, we have worked with a local company to create a series of excursions (<http://tinyurl.com/2ezw5dv>) for ICIAM delegates between July 16 and 23rd. These include trips to Whistler and Victoria, tours of the city and surrounding mountains, kayaking outings, museums and float plan adventures. Do not miss out on these amazing opportunities.

Don't forget that the deadline for abstract submissions for minisymposia and contributed speakers is December 15, 2010!

Quick ICIAM 2011 links:

* List of invited speakers (<http://tinyurl.com/2ck224g>) (including abstracts)

* List of thematic minisymposia (<http://tinyurl.com/2ez4zr7>) (including abstracts) from over 20 areas of applied & industrial mathematics

* Information on embedded & satellite meetings (<http://tinyurl.com/23586jf>)

For the latest ICIAM 2011 deadlines, announcements and reminders, sign up for e-lets (<http://tinyurl.com/2d3cy7k>) or follow ICIAM 2011 on Twitter @ICIAM2011. Don't forget to visit www.iciam2011.com.

I would like to close by expressing our sadness at the passing of Prof. Jerrold Marsden, co-Chair of the Scientific Program Committee for ICIAM 2011 and a member of the Steering Committee, who lost his battle with cancer on September 21, 2010. Jerry's influence and imprint will be strongly felt in the structure and scientific content of the Congress and his enthusiasm and knowledge will be deeply missed by his colleagues at ICIAM 2011.

We look forward to seeing you in Vancouver!

Arvind Gupta
President, ICIAM 2011
CEO & Scientific Director, MITACS

Subject: Calderon Prize
From: Gunther Uhlmann <gunther@math.washington.edu>
Date: Mon, 22 Nov 2010

CALDERON PRIZE

The Inverse Problems International Association (IPIA) will award the third Calderon Prize to a researcher under the age of 40 who has made distinguished contributions to the field of inverse problems broadly defined. The Calderon Prize Committee consists of Professors Martin Burger, Hyeonbae Kang, Yaroslav Kurylev, George Papanicolaou, and William Symes (chair). Previous winners of the award are Matti Lassas (2007) and Martin Burger (2009).

IPIA will present the award at the Applied Inverse Problems Conference to be held in College Station, Texas, May 22-27, 2011. The award will include a certificate, a \$500 prize, and an invitation to give a plenary lecture at the conference. The prize also includes reimbursement for reasonable travel expenses to College Station.

Besides a nomination letter please include a complete CV of the nominee and a list of publications. Also additional supporting letters can be included. The Calderon Prize Committee can also solicit nominations.

Nominations should be send to Professor William Symes by February 28, 2011, to the e-mail address <symes@caam.rice.edu>. Inquiries should be also be addressed to Professor Symes.

Subject: Free Access to all De Gruyter Journals in the Year of Science 2010
From: De Gruyter <marketing@degruyter.com>
Date: Tue, 2 Nov 2010

Free Access to all De Gruyter Journals in the Year of Science 2010

Dear Colleague,

Five of the oldest and internationally best-known scientific institutions in "Berlin -- Capital of Science" are celebrating their anniversaries this year. On this occasion, a large number of scientific institutions in the city are taking part in the festivities.

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Yours sincerely,

Ulrike Lippe
Public Relations
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Walter de Gruyter GmbH & Co. KG, Genthiner Straße 13,
10785 Berlin / Germany
Phone: +49 30 260 05-0 Fax: +49 30 260 05-251
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Subject: Inverse Problems, volume 26, issue 12, December 2010
From: Emma Avery <Emma.Avery@iop.org>
Date: Mon, 22 Nov 2010

Inverse Problems December 2010 Volume 26, Issue 12
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The inverse electromagnetic scattering problem in a piecewise homogeneous medium Xiaodong Liu, Bo Zhang, and Jiaqing Yang

Spatial resolution in photoacoustic tomography: effects of detector size and detector bandwidth Markus Haltmeier and Gerhard Zangerl

Importance sampling approach for the nonstationary approximation error method J M J Huttunen, A Lehtinen, J Hämäläinen, and J P Kaipio

Accuracy of the linear sampling method for inverse obstacle scattering: effect of geometrical and physical parameters
Nguyen Trung Thanh and Mourad Sini

On the multi-frequency obstacle reconstruction via the linear sampling method Bojan B Guzina, Fioralba Cakoni, and Cédric Bellis

Inverse nonlocal Sturm–Liouville problem Leonid Nizhnik

Uniqueness in shape identification of a time-varying domain and related parabolic equations on non-cylindrical domains
Hajime Kawakami and Masaaki Tsuchiya

An adjoint field approach to Fisher information-based sensitivity analysis in electrical impedance tomography
Sven Nordebo, Richard Bayford, Bengt Bengtsson, Andreas Fhager, Mats Gustafsson, Parham Hashemzadeh, Björje Nilsson, Thomas Rylander, and Therese Sjöden

Reconstruction of dielectrics from experimental data via a hybrid globally convergent/adaptive inverse algorithm
Larisa Beilina and Michael V Klibanov

Stable determination of coefficients in the dynamical anisotropic Schrödinger equation from the Dirichlet-to-Neumann map
Mourad Bellassoued and David Dos Santos Ferreira

A global optimization method using a random walk on a topological map and local variational inversions
M Berrada, F Badran, Mehdi Crépon, and S Thiria

Compressive sensing principles and iterative sparse recovery for inverse and ill-posed problems
Evelyn Herrholz and Gerd Teschke

Inverse problem of near-field scattering in multilayer media
Konstantin P Gaikovich and Peter K Gaikovich

Convergence rates for Tikhonov regularization of coefficient identification problems in Laplace-type equations
Dinh Nho Hào and Tran Nhan Tam Quyen

Stable determination of an immersed body in a stationary Stokes fluid
Andrea Ballerini

Individual articles are free for 30 days following their publication on the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/26/12>

Submitted by Emma Avery, Senior Production Editor

Subject: Table of Contents, Nonlinear Analysis: Modelling and Control
From: Romas Baronas <romas.baronas@mif.vu.lt>
Date: Wed, 1 Dec 2010

Nonlinear Analysis: Modelling & Control 2010 Volume 15, No. 4
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Symmetry analysis for steady boundary-layer stagnation-point flow of Rivlin-Ericksen fluid of second grade subject to suction

M.B. Abd-el-Malek and H.S. Hassan

Existence results for a class of $\beta_{(p,q)}$ Laplacian systems

G.A. Afrouzi and M. Mirzapour

Existence and uniqueness theorem to a unimolecular heterogeneous catalytic reaction model A. Ambrazevicius

Solution of the Davey-Stewartson equation using homotopy analysis method H. Jafari and M. Alipour

Comments on "Lie group analysis of natural convection heat and mass transfer in an inclined surface" M. Jalil and S. Asghar

Exact solutions for the unsteady rotational flow of a generalized second grade fluid through a circular cylinder

M. Kamran, M. Imran, and M. Athar

On the convergence rates of Gladyshev's Hurst index estimator

K. Kubilius and D. Melichov

Modeling nonlinear systems using multiple piecewise linear equations

G.K. Lowe and M.A. Zohdy

Qualitative behavior of three species food chain around inner equilibrium point: spectral analysis

S. Mandal, M.M. Panja, S. Ray, and S.K. Roy

Stability analysis of an eco-epidemiological model incorporating a prey refuge A.K. Pal and G.P. Samanta

On the eigenvalue problems for differential operators with coupled boundary conditions S. Sajavicius

Investigation of the spectrum for the Sturm-Liouville problem with one integral boundary condition

A. Skucaite, K. Skucaite-Bingele, S. Peculyte, and A. Stikonas

A free on-line edition is available at:

<http://www.lana.lt/journal/issues.php>

Submitted by Dr. Romas Baronas, Journal Secretary,

Nonlinear Analysis: Modelling and Control

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IPNet Digest Volume 17, Number 10 December 30, 2010

Today's Editors:

Patricia K. Lamm, Michigan State University
Cara D. Brooks, Michigan State University

Today's Topics:

Advanced Spring School: Thermal Measurements & Inverse Techniques
RTG Summer School: Inverse Problems & Partial Differential Equations
Special Issue: Inverse Problems in Mathematical Biology
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-posed Problems

Submissions for IPNet Digest:

Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Thermal Measurements and Inverse Techniques
From: Denis Maillet <Denis.Maillet@ensgsi.inpl-nancy.fr>
Date: Fri, 17 Dec 2010

Advanced Spring School:
Thermal Measurements and Inverse Techniques (Metti 5)
June 12-17, 2011
Roscoff, France

See: <http://www.sft.asso.fr/metti5> for details

Submitted by: Prof. Denis Maillet
Institut National Polytechnique de Lorraine, Nancy
recherche (research) : LEMTA -Nancy-Universit  , CNRS
2, avenue de la For  t de Haye - 54504 Vandoeuvre cedex - France
Tel: (33) 03 83 59 56 06 (ou 07)
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e-mail: denis.maillet@ensem.inpl-nancy.fr

Subject: RTG Summer School on Inverse Problems & PDEs
From: Gunther Uhlmann <gunther@math.washington.edu>
Date: Sun, 26 Dec 2010

RTG Summer School on Inverse Problems & Partial Differential Equations
June 20-July 8, 2011
University of Washington, Seattle
<http://www.math.washington.edu/ipde/summer>

The Research Training Group in the Department of Mathematics at the University of Washington will host a summer school for advanced undergraduates and beginning graduate students on Inverse Problems & Partial Differential Equations. Students will attend lectures in the morning and problem sessions in small groups with mentors in the afternoon. On-campus accommodation and meals will be provided, plus a travel allowance of up to \$500. Two mini-courses will be given:

Guillaume Bal, Steve McDowall and Gunther Uhlmann: X-Ray Tomography and Transport Theory

Donna Calhoun and Randall LeVeque: Finite Volume Methods and the Clawpack Software

Apply online by April 1 at <http://www.math.washington.edu/ipde/summer>

(The Summer School is supported by an NSF Research Training Grant. Support is restricted to U.S. citizens/permanent residents. Applications from international students may be considered, but international students must provide their own support for travel, accommodation, and meals.)

Subject: Special Issue on Inverse Problems in Mathematical Biology
From: Samuli Siltanen <samuli.siltanen@helsinki.fi>
Date: Tue, 21 Dec 2010

Call for papers

Journal of Mathematical Biology:
Special Issue on Inverse Problems in Mathematical Biology

Advances in the understanding of biology are often based on successful interpretation of indirect measurements. Those measurements may take the form of microscopic images, electrical neurophysiology data, X-ray microtomography reconstructions, or spatial distribution of species.

Sometimes the quantity of interest provides only a small and noise-sensitive contribution to the measured data, which makes the interpretation task an ill-posed inverse problem.

Theoretical and computational inversion methods has developed tremendously in recent years. The purpose of the present Special Issue is to promote the application of the newest inversion methods to studies in mathematical biology, hopefully giving a boost to both fields.

We warmly invite you to submit your manuscript online at

<https://www.editorialmanager.com/jomb/>

no later than July 31, 2011. The manuscripts will be peer-reviewed by

two anonymous experts according to the usual high standards of the Journal of Mathematical Biology. You will find instructions for authors at the webpage of the Journal of Mathematical Biology:

<http://www.springer.com/285>.

When asked 'Please select an Article Type', please make sure to choose the Special Issue "SI: inverse problems."

If you have any questions about the Special Issue, please feel free to contact either of us.

Matti Lassas and Samuli Siltanen, Guest editors
Department of Mathematics and Statistics
University of Helsinki
Finland

Matti.Lassas@helsinki.fi
Samuli.Siltanen@helsinki.fi.

Subject: Inverse Problems, volume 27, issue 1, January 2011
From: Emma Avery <Emma.Avery@iop.org>
Date: Tue, 21 Dec 2010

Inverse Problems January 2011 Volume 27, Issue 1
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New global stability estimates for the Gel'fand--Calderon inverse problem R G Novikov

Direct numerical reconstruction of conductivities in three dimensions using scattering transforms
Jutta Bikowski, Kim Knudsen and Jennifer L Mueller

Efficient modeling and compensation of ultrasound attenuation losses in photoacoustic imaging H Roitner and P Burgholzer

On the discrete one-dimensional inverse transmission eigenvalue problem
Vassilis G Papanicolaou and Aristides V Doumas

Array imaging using intensity-only measurements
Anwei Chai, Miguel Moscoso and George Papanicolaou

Carleman estimates and an inverse heat source problem for the thermoelasticity system Mourad Bellassoued and Masahiro Yamamoto

The strong convergence of a KM--CQ-like algorithm for a split feasibility problem Yazheng Dang and Yan Gao

Hierarchical models in statistical inverse problems and the Mumford--Shah functional T Helin and M Lassas

Estimation of transmission eigenvalues and the index of refraction from
Cauchy data Jiguang Sun

Individual articles are free for 30 days following their publication on
the web. This issue is available at:
<http://iopscience.iop.org/0266-5611/27/1>

Submitted by Emma Avery, Senior Production Editor

Subject: J. Inverse and Ill-posed Problems, Vol. 18, Nos. 5-6 (2010)
From: "reference-global@degruyter.com" <reference-global@degruyter.com>
Date: Tue, 21 Dec 2010

J. of Inverse and Ill-posed Problems December 2010 Vol. 18, No. 5
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Mikhail M. Lavrentiev - Obituary
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On a criterion of solvability of the inverse problem of heat conduction
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Calibrating local volatility in inverse option pricing using the
Levenberg-Marquardt method
Aref Lakhal, Mohamed Majdi Lakhal, and Alfred Karl Louis

On the approximations of derivatives of integrated semigroups
Miao Li, Vladimir Morozov, and Sergey Piskarev

On the ill-posedness and convergence of the Shack-Hartmann based
wavefront reconstruction Andreas Neubauer

The comparison model method for determining the flexural rigidity of a
beam D. Lesnic

The above issue is now available online from Walter de Gruyter at:
<http://www.reference-global.com/toc/jiip/2010/18/5?ai=124&ui=34xi&af=T>

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Michal J. Cialkowski and Krzysztof Grysa

A quasi-boundary-value method for the Cauchy problem for elliptic

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Regularization methods for unbounded linear operators
Andrzej Pokrzywa

Discrepancy curves for multi-parameter regularization
Shuai Lu, Sergei V. Pereverzev, Yuanyuan Shao, and Ulrich Tautenhahn

Theory and examples of variational regularization with non-metric
fitting functionals Jens Flemming

Conjugate gradient regularization under general smoothness and noise
assumptions Gilles Blanchard and Peter Mathe

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<http://www.reference-global.com/toc/jiip/2010/18/6?ai=124&ui=34xi&af=T>
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