Contents

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

Today's Topics:
        14th Inverse Problems in Engineering Seminar, July 2006
        SIAM Conference on Imaging Science -- Program Available
        Int'l Workshop on Accurate Solution of Eigenvalue Problems
           Alberto Calderon's Foundational Paper Now Online
        New book: Parameter Identification of Materials, Structures
        PhD-Position at RICAM Linz in Direct and Inverse Modeling
        Table of Contents: Electronic Trans. on Numerical Analysis
        Table of Contents: Linear Algebra and Its Applications

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.mth.msu.edu/ipnet

From: Mark Bryden <kmbryden@iastate.edu>
Subject: IPES 2006
Date: Friday, December 23, 2005 1:14 PM

Colleagues,

This is to announce the call for papers for 14th Inverse Problems in
Engineering Seminar. The seminar will be held July 26-27, 2006 at Iowa
State University in Ames, Iowa, USA.

The Fourteenth Inverse Problems in Engineering Seminar is being
organized at Iowa State University. This event is the continuation of
the informal seminars which were initiated at Michigan State
University in 1988. Papers are solicited from all areas involving
inverse methods and their applications. Four broad categories are
being used to organize sessions. These categories, with some
subtopics delineated, are:

1. Inverse Problems in Heat Transfer
        Inverse Heat Conduction
        Thermal Property Estimation
2. Mathematical Aspects of and Techniques for Inverse Problems
        Inverse Theory and Methods
        Stability and Error Analysis
3. Design of Experiments and Applications of Inverse Methods
        Optimal Experiment Design
        Analysis of Actual Experimental Data
4. Inverse Problems Exclusive of Heat Transfer

5. Bio-Engineering Inverse Problems

6. Tomography and Inverse Scattering

Important dates for the conference are

  January 31, 2006 - Abstracts (300 words) due

February 15, 2006 - preliminary acceptance notification to authors

March 15 - Submit PDF version of paper for review

May 30 - Final acceptance notification to authors

June 30 - Final camera-ready version of full paper due

Additional information is available at www.inverseproblems.org

Chair: Professor Mark Bryden
Iowa State University
kmbryden@iastate.edu

Co-Chair: Keith A. Woodbury
University of Alabama, USA,
woodbury@me.ua.edu

Submitted by: Keith A. Woodbury" <woodbury@me.ua.edu>

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: SIAM Conference on Imaging Science - Program Available
Date: Thu, 22 Dec 2005

Subject: SIAM Conference on Imaging Science - Program Now Available!

Conference Name: SIAM Conference on Imaging Science=20

Location: Radisson Hotel Metrodome, Minneapolis, Minnesota

Dates: May 15-17, 2006

Invited Plenary Speakers:
Emmanuel Candes, California Institute of Technology
Frederic Guichard, DxO Labs
Hugues Hoppe, Microsoft Research
Robert Hummel, Defense Advanced Research Projects Agency
Alexander Katsevich, University of Central Florida
Luminita Vese, University of California, Los Angeles

The program for this conference is now available:
  http://www.siam.org/meetings/is06/program.htm
Hotel information is also available:
  http://www.siam.org/meetings/is06/htlinfo.htm
Registration information will be posted to this same site in
February 2006.

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

From: Jesse Barlow <barlow@cse.psu.edu>
Subject: IWASEP Vi-Call for Abstracts
Date: Mon, 02 Jan 2006

International Workshop on Accurate Solution of Eigenvalue Problems VI
                        IWASEP VI

Information Science and Technology Building
 The Pennsylvania State University
 University Park, PA

May 22-25,2006

Abstract Deadline: March 15, 2006 (moved back two weeks)

In cooperation with SIAM.

The purpose of this workshop is to bring together experts on accuracy
issues in the numerical solution of eigenvalue problems for four days
of research presentations and discussions. This is the sixth such
workshop. The most recent was held in Hagen, Germany, June 28-July 1,
2004.

The following researchers have agreed to give invited talks at IWASEP
VI:Christopher Beattie, Virginia Polytechnic and State University;
James Demmel, University of California at Berkeley; Inderjit Dhillon,
University of Texas; Mark Embree, Rice University;Gene Golub, Stanford
University; Nicholas J. Higham, University of Manchester; Plamen Koev,
MIT; Volker Mehrmann, TU-Berlin; Ren-Cang Li, University of Kentucky;
Ilse Ipsen, North Carolina State University; Beresford Parlett,
University of California at Berkeley; Danny Sorensen, Rice University;
G.W. Stewart, University of Maryland.

In addition, the organizers welcome submitted presentations and posters
that are consistent with the theme of the meeting. To submit an abstract
for a presentation or poster, please visit the web page
     http://www.cse.psu.edu/~iwasep6/Apply.html.
Deadline for abstracts is March 15, 2006.

Some travel funding is available with preference given to graduate
students and new Ph.D.'s. We expect that on-line registration will be
available by mid-January through the workshop web page
     http://www.cse.psu.edu/~iwasep6/.
This workshop is supported by the National Science Foundation and the
Pennsylvania State University. For further information please email
iwasep6@cse.psu.edu.

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: Calderon's foundational paper on-line
Date: Thu, 5 Jan 2006

Alberto Calderon's foundational paper on the inverse conductivity
problem,
        A.P. Calderon, ON AN INVERSE BOUNDARY VALUE PROBLEM, in
        Seminar on Numerical Analysis and its Applications to
        Continuum Physics, Rio de Janeiro, Sociedade Brasileira de
        Matematica, (1980). 65-73.

is rather hard to find in print with dog eared photocopies circulating by
hand. I have never seen the proceedings in a library.

So I had my own (faded, dog eared) copy scanned to a pdf file so that
future generations can obtain it more easily. It can be found here:

http://www.ma.umist.ac.uk/bl/Calderon/

If anyone has a better scanned version please let me know!

--
Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.ma.umist.ac.uk/bl

From: gestavr@dpem.tuc.gr
Subject: New book: Parameter Identification of Materials and Structures
Date: Tue, 20 Dec 2005

New Book Information

Parameter Identification of Materials and Structures
Series: CISM International Centre for Mechanical Sciences, Number 469
Mroz, Zenon; Stavroulakis, Georgios E. (Eds.)
2005, Approx. 345 p. 180 illus., Softcover
ISBN: 3-211-30151-8

The nature and the human creations are full of complex, phenomena,
which sometimes can be observed but rarely follow our hypotheses. The
best we can do is to build a parametric model and try to adjust
(identify) the unknown parameters based on the available observations.
The authors discuss problems relevant to materials and structures like
inverse analysis in structures, crack, material parameter and damage
identification, modal analysis and thermographic methods. The solution
methods vary from classical optimization to neural networks and
genetic algorithms. Since all the authors are engineers, well-known in
the academic and industrial world, the emphasis is posed on methods
which really work. In fact, the chapters provide state-of-the-art
information supplemented by selected examples and numerous references
to modern publications, so that the reader can directly proceed with
the study of his own problems.

Table of contents

Preface.
Bolognini, L., An overview of enhanced modal identification.
Bui, H. D., Constantinescu, A., Maigre, H., The reciprocity gap
  functional for identifying defects and cracks.
Maier, G., Bocciarelli, M., Fedele, R., Some innovative industrial
  prospects centered on inverse analyses.
Mroz, Z., Dems, K., Identification of damage in beam and plate
  structures using parameter dependent modal changes and thermographic
  methods.
Stavroulakis, G. E., Engelhardt, M., Antes, H., Crack and flaw
  identification in statics and dynamics, using filter algorithms and
  soft computing.
Toropov, V., Yoshida, F., Application of advanced optimization
  techniques to parameter and damage identification problems.
Waszczyszyn, Z., Ziemianski, L., Neutral networks in the
  identification analysis of structural mechanics problems.

More Information from the publisher
http://www.springer.at/main/book.jsp?bookID=3-211-30151-8&categoryID=6
or
http://www.springer.com/sgw/cda/frontpage/0,11855,1-40109-22-105287732-
0,00.html

Message sent by Professor Georgios E. Stavroulakis,
Technical University of Crete, Greece
http://users.isc.tuc.gr/~gestavroulakis

From: "Martin Burger" <martin.burger@jku.at>
Subject: PhD-Position at RICAM Linz
Date: Sat, 24 Dec 2005

A three-year PhD-Position is available from March 1, 2006, at the
Johann Radon Institute for Computational and Applied Mathematics
(Austrian Academy of Sciences), Linz, Austria. The position is part
of the newly established doctoral

school "Molecular Bioanalytics: From Molecular Recognition to Membrane
Transport" funded by the Austrian National Science Foundation, and
will enable the successful candidate to interact with groups in
molecular biology, biophysics, and / or chemistry, as well as to
participate in a curriculum including laboratory courses.

Details about the Radon Institute can be found at
http://www.ricam.oeaw.ac.at, and about the doctoral school at
http://www.wissen.jku.at/mobaindex.htm.

The topic of the PhD-thesis in our project is "Direct and Inverse
Modeling and Simulation of Transport through Membranes and Water
Channels". The aim is to develop models and numerical simulations of
water transport through membranes and channels that should allow
quantitative predictions in realistic situations.

These models will involve partial differential equations. Using these
models, the second aim is to determine structural properties of
membranes and channels from available indirect measurements in
adjacent water layers. The mathematical formulation of these inverse
problems leads to parameter identification in systems of partial
differential equations, for whose solution appropriate regularization
methods should be developed.

We are seeking talented and committed individuals, with an excellent
master or diploma in applied mathematics, physics, or biophysics, to
join the programme. Preference is given to applicants younger than
28. Selection will be made during the "Linz Winter Workshop"
(Februrary 3 - 7, 2006), to which the best applicants will be invited.

We offer a gross salary of 22900 Euro per year.

Applications including covering letter, full c.v., and copies of the
graduation certificate should be sent before January, 21 to the
speaker of the program:

Univ.-Prof. Dr. Peter Pohl
Institute of Biophysics
Johannes Kepler University
Altenberger Str. 69
A-4040 Linz, Austria
peter.pohl@jku.at

with a copy to

Annette Weihs

Electronic Transactions on Numerical Analysis   2005   Volume 20
                    Table of Contents

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

M. E. Hochstenbach

A linear acceleration row action method for projecting onto subspaces
G. Appleby and D. C. Smolarski

                    Table of Contents

A concavity inequality for symmetric norms   J.C. Bourin

Iterations of linear maps over finite fields
M. Misiurewicz, J.G. Stevens, D.M. Thomas

Dynamic feedback over principal ideal domains and quotient rings
J.A. Hermida Alonso, M.M. Lopez-Cabeceira

Submitted by: Hans Schneider
Mathematics Department, Van Vleck Hall, University of Wisconsin,
480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans
------- end -------

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

Today's Topics:
     Inverse Problems Workshop in Liverpool
     SIAM Conference on Imaging Science
     Question on Image Acquisition Problem
     Postdoctoral Position: Inverse Problems in Systems Biology
     IJISS: Computational Aspects of Soft Field Tomography
     Special Issue: Linear Algebra and Its Applications
     Table of Contents: Inverse Problems
     Table of Contents: Int'l Journal of Tomography & Statistics
     Table of Contents: Linear Algebra and Its Applications

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.mth.msu.edu/ipnet

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: Inverse problems workshop Liverpool March 20th
Date: Wed, 8 Feb 2006

The British Inverse Problems Society is holding an Inverse Problems
Workshop at the Department of Mathematical Sciences at the University
of Liverpool on Monday, 20th March, 2006. Supported by the London
Mathematical Society and Department of Mathematical Sciences,
University of Liverpool

Programme:
13.10-14.00 Marco Marletta (University of Cardiff):
     "Weak stability for inverse Sturm-Liouville problems with finite
      data" (joint work with Rudi Weikard of University of Alabama at
      Birmingham)
14:00-14:50 Daniel Lesnic (University of Leeds):
     "Inverse source problems for the heat equation".
14:50-15:40 Roy Pike (Kings College London):
     "Can you hear the shape of the vocal tract?"
16:10-17:00 Brian Sleeman (University of Leeds):
     "Weyl asymptotics and acoustic scattering by irregular
      obstacles"

Further details:
    Ke Chen,
     Dept of Mathematical Sciences,
     The University of Liverpool, UK
    k.chen@liverpool.ac.uk

And see British Inverse Problems Society web site
htttp://www.ma.umist.ac.uk/bl/ukipws

Submitted by: Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.ma.umist.ac.uk/bl

```
----------------------------
From: "Kirsten Wilden" <Wilden@siam.org>
Subject: SIAM Conference on Imaging Science - Registration Available
Date: Fri, 17 Feb 2006

Subject: SIAM Conference on Imaging Science
         Registration Now Available!

Conference Name: SIAM Conference on Imaging Science

Location: Radisson University Hotel-MPLS, Minneapolis, Minnesota

Dates: May 15-17, 2006

Invited Plenary Speakers:
Emmanuel Candes, California Institute of Technology
Frederic Guichard, DxO Labs
Hugues Hoppe, Microsoft Research
Robert Hummel, Defense Advanced Research Projects Agency
Alexander Katsevich, University of Central Florida
Luminita Vese, University of California, Los Angeles=20

Conference webpage: http://www.siam.org/meetings/is06/
Conference program: http://meetings.siam.org/program.cfm?CONFCODE=3DIS06
Hotel information:  http://www.siam.org/meetings/is06/htlinfo.htm
Registration for this conference is now available:
http://www.siam.org/meetings/is06/reginfo.htm

The hotel and registration deadline is April 17, 2006.

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

----------------------------
From: "Jones, Graeme A" <G.Jones@kingston.ac.uk>
Subject: Question on image acquisition problem
Date: Wed, 22 Feb 2006

Hi IPNet,

Though old, I'm new to this Inverse Problems universe!

Background:

I have an image acquisition problem based on a CCD with pixel defects.
Layered over this acquisition process is a series of IP prossessing
modules eg interpolation, white-point correction, gamma correction and
compression. I also have a large amount of video taken from the
device.  Oh ... and there may be some optical filtering prior to
capture!

Specific Query:

How do I go about reconstructing the parameters associated with each
of the processes as well as the pixel defect pattern? Any hints on how
I get my guys to tackle this problem? Collaboration very much
encouraged.

Regards
```

Graeme

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: Postdoctoral position in inverse problems in systems biology
Date: Fri, 20 Jan 2006

My colleagues in the Manchester Interdiciplinary Biocentre
              http://www.mib.ac.uk/
are interested in identifying coefficents in large systems of ODEs
arising in systems biology.

The job advert appears at http://www.jobs.ac.uk/jobfiles/AD704.html
although the job description is not very well written I understand
they are interested in recruiting a mathematician with experience in
numerical solution of inverse problems.

Of course we have an active Inverse Problems group here in the School
of Mathematics, as well as strong groups in Dynamical Systems and
Mathematical Biology and we have a good relations with our colleagues
in the biomedical sciences. We would of course like to encourage
mathematicans to apply.

Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.ma.umist.ac.uk/bl

From: Manuchehr Soleimani <M.Soleimani-2@manchester.ac.uk>
Subject: Computational Aspects of Soft Field Tomography
Date: Sat, 7 Jan 2006

Special Issue on Computational Aspects of Soft Field Tomography

Guest editor: Manuchehr Soleimani

William Lee Innovation Centre, School of Materials, University of
Manchester, Manchester M60 1QD, UK
http://personalpages.umist.ac.uk/staff/M.Soleimani-2/
Email:m.soleimani@manchester.ac.uk

Advancements in imaging technology using soft field tomography have
provided a new opportunity for medical and industrial process
monitoring. We invite the submission of papers describing
computational aspects of those imaging methods. This includes
electrical impedance tomography, electrical capacitance tomography,
magnetic induction tomography, optical tomography, etc. There are
similarities as well as differences in computational aspects of
different imaging techniques. The computational techniques may vary
depending on the applications in mind.

This special issue bringing together new results in different
techniques, for different types of applications. Computation of the
forward problems in 2D and 3D, sensitivity analysis, image and shape
reconstruction methods. Various techniques, linear, nonlinear,
statistical methods, data fusions are in scope of this special issue.

International Journal for information and systems sciences seeks high
quality research papers for this special issue. Authors should submit

their manuscripts electronically to guest editor with IJISS
Instructions: http://www.math.ualberta.ca/ijiss/SS-macros.htm

Submission deadline: First April 2006

Notification of acceptance: First June 2006

In final form: First of July 2006

Publication: First of September 2006

http://www.math.ualberta.ca/ijiss/Special-issue-1.htm

Submitted by: Dr Manuchehr Soleimani
William Lee Innovation Centre
School of Materials, University of Manchester
http://personalpages.manchester.ac.uk/staff/M.Soleimani-2/
Tel : (+44)(161-3065695)
Fax : (+44)(161-3065748)

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA Special Issue
Date: Wed, 22 Feb 2006

LINEAR ALGEBRA AND ITS APPLICATIONS
Special Issue in honor of Paul Fuhrmann
Second Announcement with extended submission deadline

Linear Algebra and its Applications is pleased to announce a special
issue in honor of Professor Paul Fuhrmann on the occasion of his 70th
birthday on 5 August 2007 in recognition of his many important and
fundamental contributions to linear algebra and control theory.

We solicit papers for the special issue within the entire scope of LAA
or the research interests of Paul Fuhrmann. We welcome papers within
system and control theory and operator theory; in particular in

    * algebraic systems theory
    * approximation, identification and interpolation
    * behavioral theory
    * coding theory with relations to systems theory
    * functional models
    * geometric control
    * hybrid and discrete event systems
    * matrix-valued and operator-valued functions
    * model reduction
    * multidimensional systems
    * numerical and computational aspects
    * operators, systems, and linear algebra
    * polynomial methods in systems theory
    * robust and optimal control
    * spectral factorizations
    * stability theory
    * system structure
    * uncertain systems
    * Wiener-Hopf factorizations

The deadline for submission of papers is 31 July 2006. Papers for
submission should be sent to any of the five special editors, preferably

pdf files as attachments in email, and will be subject to normal
refereeing procedures according to LAA standards:

   Athanasios C. Antoulas.
   Department of Electrical & Computer Engineering
   Rice University
   P.O. Box 1892 - MS 380
   Houston, Texas 77251-1892, USA
   aca@rice.edu

   Uwe Helmke
   Department of Mathmematics
   University of Wuerzburg
   Am Hubland
   97074 Wuerzburg, Germany
   helmke@mathematik.uni-wuerzburg.de

   Joachim Rosenthal
   Mathematics Institute
   University of Zurich
   Winterthurerstr 190
   CH-8057 Zurich, Switzerland
   rosenthal@math.unizh.ch

   Victor Vinnikov
   Department of Mathematics
   Ben Gurion University of the Negev
   84105 Beer-Sheva, Israel
   vinnikov@math.bgu.ac.il

   Eva Zerz
   Lehrstuhl D fuer Mathematik, RWTH Aachen,
   Templergraben 64, D-52062 Aachen, Germany
   Tel: + 49 (0)241 80 94544, Fax: -- 92108
   eva.zerz@math.rwth-aachen.de

The editor-in-chief responsible for this special issue is Hans Schneider.

Submitted by: Hans Schneider
Mathematics Department, Van Vleck Hall, University of Wisconsin,
480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents list for Inverse Problems
Date: Mon, 30 Jan 2006

Inverse Problems   February 2006   Volume 22, Issue 1
                  Table of Contents

Force inversion in floating plate dynamics
K Dempsey, N Grossman and I Vasileva

All articles are free for 30 days after publication on the web. This
issue is available at: http://stacks.iop.org/IP/22/i=3D1

Int'l Journal of Tomography & Statistics Winter 2006 Vol 4, No. W06
                  Table of Contents

Bayesian Methods for a Particular Inverse Problem: Seismic Tomography
Ana K. Fermin, Jean-Michel Loubes and Carenne Ludena

Second Level KT-1 Signature of CT Scanned Medical Images
Mayuri Razdan, Amit Kumar and Prabhat Munshi

Edges Detection of Brain Magnetic Resonance Images by Multiscale
Morphology
Zhao Yu-qian, Gui Wei-hua, Chen Zhen-cheng and Li Ling-yun

Spline Interpolation in Filtered Back Projection Algorithm
M. Venu Gopala Rao and S. Vathsal

Detailed instructions on how to prepare your manuscript are available
at "Instructions for Author".

http://www.geocities.com/isder_ceser/IJTS1.html

Linear Algebra and its Applications   April 1, 2006   Vol. 414, Issue 1

Ternary analogues of Lie and Malcev algebras
Murray R. Bremner and Luiz A. Peresi

On some norm equalities in pre-Hilbert C*-modules
Ljiljana Arambasic and Rajna Rajic

Laplacian energy of a graph
Ivan Gutman and Bo Zhou

Orbits in max-min algebra
Blanka Semancikova

Polynomial perturbations of bilinear functionals and Hessenberg
matrices   M.I. Bueno and F. Marcellan

Solution of a tridiagonal operator equation
R. Balasubramanian, S.H. Kulkarni and R. Radha

Call for Papers: Special Issue on Structured Matrices

http://www.sciencedirect.com/science/issue/5653-2006-995859998-617415

Submitted by: Hans Schneider
Mathematics Department, Van Vleck Hall, University of Wisconsin,
480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans
------- end -------

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

Today's Topics:
     Workshop: Variational and PDE Level Set Methods
     Post-doctoral position: Identification in Mathematical Models
     New journal: Mathematical and Computational Approaches to Music
     Table of Contents: Inverse Problems
     Table of Contents: Inverse Problems in Science and Engineering
     Table of Contents: Nonlinear Analysis: Modelling and Control
     Table of Contents: Linear Algebra and Its Applications

Submissions for IPNet Digest:
       Mail to ipnet-digest@math.msu.edu

Information about IPNet:
       http://www.math.msu.edu/ipnet

From: Klaus Frick <klaus.frick@uibk.ac.at>
Subject: Announcing Workshop: Variational and PDE Level Set Methods
Date: Thu, 16 Mar 2006

Workshop: Variational and PDE Level Set Methods
Obergurgl, Tyrol, Austria
September 1st - 3rd, 2006
http://infmath.uibk.ac.at/obergurgl2006/
infmath-informatik@uibk.ac.at

Aim and Scope:
Within the Forschungsschwerpunktprogramm "Industrial Geometry" founded
by the Austrian Science Foundation (FWF) we are organizing a workshop
on "Variational, PDE, and Level Set Methods" in Obergurgl, Tyrol,
Austria (September 1st - 3rd, 2006). The focus of this workshop will
be on PDE and variational methods on manifolds, as well as level set
methods. Theoretical as well as numerical aspects should be
covered. We encourage you to participate. You can enrol at the
workshop homepage and if you plan to give a talk or present a poster
please submit an abstract there or mail us.

Organizer:
Otmar Scherzer (University of Innsbruck)
Klaus Frick (University of Innsbruck)
Matthias Fuchs (University of Innsbruck)

Invited Speakers:
Martino Bardi (University of Padova)
Martin Burger (Johannes Kepler University, Linz)
Vicent Caselles (Balearic Islands University)
Gerhard Dziuk (Albert Ludwig University, Freiburg)
Irene Fonseca (Carnegie Mellon University, Pittsburgh)
Stanley Osher (University of California at Los Angeles)
Martin Rumpf (Rheinische Friedrich-Wilhelms University, Bonn)
Christoph Schnoerr (University of Mannheim)
Fiorella Sgallari (University of Bologna)
Gabriele Steidl (University of Mannheim)
Joachim Weickert (Saarland University)

Jean-Paul Zolesio (INRIA)

Important Dates: Deadline for registration and abstract submission:
July 30, 2006.

From: "Rainer.Kress" <kress@math.uni-goettingen.de>
Subject: Post-doctoral position: Identification in Mathematical Models
Date: Wed, 22 Mar 2006

A two-year post doctoral postion is available October 1, 2006, at the
graduate program (Graduiertenkolleg) Identification in Mathematical
Models
at the University of Goettingen. Details can be found at

http://www.num.math.uni-goettingen.de/gk/index.php?LANG=EN
http://www.num.math.uni-
goettingen.de/gk/open_postdoc_position.php?LANG=EN

Professor Rainer Kress
Institut für Numerische und Angewandte Mathematik
Lotzestr. 16-18, D 37083 Goettingen, Germany
Tel: 0049 551 394511 Fax: 0049 551 393944
http://www.num.math.uni-goettingen.de/kress

From: <Rhiannon.Rees@tandf.co.uk>
Subject: New journal: Mathematical and Computational Approaches to Music
Date: Wed, 15 Mar 2006

New for 2007:
Journal of Mathematics & Music: Mathematical and Computational
Approaches to Music, Analysis and Composition
<http://www.tandf.co.uk/journals/titles/17459737.asp>

Register to receive free tables of contents alerts at
        www.tandf.co.uk/sara
Register for our mathematics and statistics e-updates service at
        www.tandf.co.uk/eupdates

Submitted by: Rhiannon Rees
Senior Marketing Executive - Applied Sciences Journals
Taylor & Francis Group
4 Park Square, Milton Park, Abingdon, OXON OX14 4RN
Tel: +44 (0) 207 017 6435
Fax: +44 (0) 207 017 6714
Website: www.tandf.co.uk/journals

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents list for Inverse Problems, April 2006
Date: Mon, 27 Mar 2006

Inverse Problems   April 2006   Volume 22, Issue 2
                        Table of Contents

LETTER TO THE EDITOR
On uniqueness in refractive index optical tomography
T Khan, A Thomas and J-R Yoon

Using level set based inversion of arrival times to recover shear wave speed in transient elastography and supersonic imaging
J McLaughlin and D Renzi

All articles are free for 30 days after publication on the web. This issue is available at: http://stacks.iop.org/IP/22/i=3D2

From: "jamesverebeck" <jamesverebeck@comcast.net>
Subject: Contents, Inverse Problems in Science and Engineering
Date: Sat, 25 Feb 2006

Inverse Problems in Science and Engineering Jan 2006 Vol. 14, No. 1
                  Table of Contents

                    ****

Inverse Problems in Science and Engineering Mar 2006 Vol. 14, No. 2
                  Table of Contents

Heat experiment design: factors of identification error reduction
M. Romanovski

The adjoint method coupled with the modal identification method for
nonlinear model reduction   Y. Favennec, M. Girault and D. Petit

Characterising the parameter space of a highly nonlinear inverse
problem   P. J. Ballester and J. N. Carter

Level set reconstruction of conductivity and permittivity from
boundary electrical measurements using experimental data
M. Soleimani, W. R. B. Lionheart and O. Dorn

****

Inverse Problems in Science and Engineering Apr 2006 Vol. 14, No. 3
                     Table of Contents

From: Romas Baronas <romas.baronas@maf.vu.lt>
Subject: Contents, Nonlinear Analysis: Modelling and Control
Date: Fri, 03 Mar 2006

Nonlinear Analysis: Modelling and Control   2006   Vol. 11, No. 1
                     Table of Contents

Sturm-Liouville Problem for Stationary Differential Operator with
Nonlocal Two-Point Boundary Conditions
S. Peciulyte and A. Stikonas

Asymptotic Stability of an Abstract Delay Functional-Differential
Equation
J.M. Tchuenche

Dynamics Analysis and Limit Cycle in a Delayed Model for Tumor Growth
with Quiescence   R. Yafia

From: Hans Schneider <hans@math.wisc.edu>
Subject: Contents: Linear Algebra and its Applications
Date: Sat, 11 Mar 2006

Linear Algebra and its Applications   15 Apr 2006 Vol. 414, Issues 2-3
                    Table of Contents

matrices   William C. Waterhouse

{-1, 0, 1}-Basis for the null space of a forest
Saieed Akbari, Alireza Alipour, Ebrahim Ghorbani and
Gholamreza B. Khosrovshahi

A new upper bound for the spectral radius of graphs with girth at
least 5   Mei Lu, Huiqing Liu and Feng Tian

Rigid systems of second-order linear differential equations
M . Isabel Garcia-Planas, M. Dolors Magret, Vladimir V. Sergeichuk
and Nadya A. Zharko

On Schur complement of block diagonally dominant matrices
Cheng-yi Zhang, Yao-tang Li and Feng Chen

On the stability of a convex set of matrices
Vakif Dzhafarov and Taner Buyukkoroglu

Solving symmetric matrix word equations via symmetric space machinery
Jimmie Lawson and Yongdo Lim

Bilateral shorted operators and parallel sums
Jorge Antezana, Gustavo Corach and Demetrio Stojanoff

Hessenberg eigenvalue-eigenmatrix relations
Jens-Peter M. Zemke

Rank-permutable additive mappings
A.A. Alieva, A.E. Guterman and B. Kuzma

The kernels of the incidence matrices of graphs revisited
Saieed Akbari, Narges Ghareghani, Gholamreza B. Khosrovshahi and
Hamidreza Maimani

Secret sharing based on a hard-on-average problem
P. Caballero-Gil and C. Hernandez-Goya

Robust controllability for linear uncertain descriptor systems
Jyh-Horng Chou, Shinn-Horng Chen and Qing-Ling Zhang

Patterns on numerical semigroups
Maria Bras-Amoros and Pedro A. Garcia-Sanchez

http://www.sciencedirect.com/science/issue/5653-2006-995859997-618629

****

Linear Algebra and its Applications   1 May 2006 Vol. 415, Issues 1
Table of Contents

Special Issue on Large Scale Linear and Nonlinear Eigenvalue Problems
Edited by Zhaojun Bai, Andrew Knyazev and Henk A. van der Vorst

Preface
Zhaojun Bai, Andrew Knyazev and Henk A. van der Vorst

Balancing sparse Hamiltonian eigenproblems
Peter Benner and Daniel Kressner

Fast low-rank modifications of the thin singular value decomposition
Matthew Brand

Continuous methods for extreme and interior eigenvalue problems
Gene H. Golub and Li-Zhi Liao

Krylov type subspace methods for matrix polynomials
Leonard Hoffnung, Ren-Cang Li and Qiang Ye

On proximity of Rayleigh quotients for different vectors and Ritz
values generated by different trial subspaces
Andrew V. Knyazev and Merico E. Argentati

A harmonic restarted Arnoldi algorithm for calculating eigenvalues and
determining multiplicity   Ronald B. Morgan and Min Zeng

A geometric theory for preconditioned inverse iteration IV: On the
fastest convergence cases   Klaus Neymeyr

Cluster robustness of preconditioned gradient subspace iteration
eigensolvers   E. Ovtchinnikov

Cluster robust error estimates for the Rayleigh-Ritz approximation I:
Estimates for invariant subspaces   E. Ovtchinnikov

Cluster robust error estimates for the Rayleigh-Ritz approximation II:
Estimates for eigenvalues   E. Ovtchinnikov

Preconditioned iterative methods for a class of nonlinear eigenvalue
problems   Sergey I. Solov'ev

http://www.sciencedirect.com/science/issue/5653-2006-995849998-619468

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall,
University of Wisconsin, 480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans
------- end -------

IPNet Digest   Volume 13, Number 04   May 31, 2006

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

Today's Topics:
     Conference: Scale-Space & Variational Methods in Computer Vision
     ACM-SIAM Symposium: Discrete Algorithms
     SIAM Annual Meeting and Joint Conferences
     PhD Position: Inverse Problems in Biophysics
     PhD Positions: Inverse Problems in Tomography
     Postdoctoral Position: Ultrasonic imaging
     Table of Contents: Inverse Problems
     Table of Contents: Nonlinear Analysis: Modelling and Control
     Table of Contents: Mathematics of Control, Signals, and Systems
     Table of Contents: Linear Algebra and Its Applications

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.math.msu.edu/ipnet

From: "Prof. Fiorella Sgallari" <sgallari@dm.unibo.it>
Subject: Conference: Scale-Space and Variational Methods in Computer
Vision
Date: Mon, 10 Apr 2006

The First International Conference on Scale-Space and Variational
Methods in Computer Vision. Ischia, Italy, May 30- June 2, 2007

FIRST ANNOUNCEMENT and CALL FOR PAPERS

This international conference is a joint edition of the 6th Scale
Space and the 4th VLSM and it will be a first attempt to bring
together two different communities with joint research interests, the
one of scale space analysis and the one of variational, geometric and
level set methods and their applications in image interpretation and
understanding. Such a conference would serve several purposes:
international researchers and students would be exposed to
state-of-the-art research on mathematical, physical and computational
aspects of imaging, computer vision, graphics and inverse problems
with applications.

TOPICS Linear Scale-Space Theory, Nonlinear Diffusion, Morphological
Image Processing, Differential Geometry & Geometric Flows, PDE-Level
Set, Langrangian & Variational Methods,Statistical Methods &
Energy-minimization Approaches

This conference deals with all aspects of these aspects, including
- theoretical foundations
- efficient numerical methods,
- applications in image and surface processing and computer vision
  (image restoration, shape analysis, grouping, segmentation, motion,
  stereo, registration)
- applications in other fields (biomedical applications, industrial
  inspection, security).

IMPORTANT INFORMATIONS
It is planned to publish the proceedings in the Springer Lecture Notes
in Computer Science Series. Selected papers will appear in a special
issue of the International Journal of Computer Vision. Prospective
authors are encouraged to submit manuscripts of not more than 12 pages
in Springer LNCS format by October 23rd, 2006.

IMPORTANT DATES
Abstract submission: October 16th, 2006
Full paper submission: October 23rd, 2006
Notification of acceptance: January 15th, 2007
Deadline for final paper: February 15th, 2007
Conference: May 30 - June 2, 2007

GENERAL CO-CHAIRS and ORGANIZERS
Fiorella Sgallari   University of Bologna Italy
Almerico Murli   University of Naples, Italy
Nikos Paragios   Ecole Centrale de Paris, France

CONFERENCE CHAIRS
Alfred Bruckstein   Technion IIT, Israel
Bart ter Haar Romeny   Eindhoven University of Technology, NL
Guillermo Sapiro   University of Minnesota, USA
Joackim Weickert   Saarland University, Germany

For more details, see   http://ssvm07.ciram.unibo.it/

[This news item has been edited for length: please see the website
above for more information. -Ed]

Prof. Fiorella SGALLARI
Dept. of Mathematics   C.I.R.A.M. Research Center
Faculty of Engineering
University of Bologna   University of Bologna
Piazza di Porta San Donato 5   Via Saragozza 8
40127 Bologna (ITALY)   40123 Bologna (ITALY)
E-mail: SGALLARI@DM.UNIBO.IT   SGALLARI@CIRAM.ING.UNIBO.IT
Tel.:   + 39 051 2094482   + 39 051 2093982
Fax: + 39 051 2094490   + 39 051 582528
Home page: http://www.ciram.unibo.it/~sgallari/

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: ACM-SIAM Symposium on Discrete Algorithms
Date: Wed, 5 Apr 2006

Conference Name: ACM-SIAM Symposium on Discrete Algorithms (SODA07)

Conference Program Chair: Hal Gabow, University of Colorado, Boulder

Location: Astor Crowne Plaza Hotel, New Orleans, Louisiana

Dates: January 7-9, 2007

The Call for Presentations for this symposium is available at:
http://www.siam.org/meetings/da07/

Submission Deadline: July 5, 2006

For additional information, contact the SIAM Conferences Department at

meetings@siam.org.

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: 2006 SIAM Annual Meeting and Joint Conferences
Date: Thu, 13 Apr 2006

Registration and Programs Now Available

Conference Names:
 SIAM Annual Meeting (AN06), being held jointly with the SIAM
 Conference on Financial Mathematics and Engineering (FM06) and the
 SIAM Conference on Analysis of Partial Differential Equations (PD06)

Location:
 Boston Park Plaza Hotel and Towers, Boston, Massachusetts

 Dates:
 AN06 - July 10-14, 2006
 FM06 - July 9-12, 2006
 PD06 - July 10-12, 2006

Short Courses (http://www.siam.org/meetings/pd06/shortcourses.php)
 Two short courses will be held immediately preceding the conference on
 Sunday, July 9, 2006 at the same location.

 SC1: Constantine M. Dafermos, Brown University
 Conservation Laws and Continuum Physics

 SC2: Lawrence C. Evans, University of California, Berkeley
 Recent Developments in Weak Convergence Methods for Nonlinear PDE

Registration is Now Available!

Pre-Registration Deadline: Wednesday, June 7, 2006
Hotel Reservation Deadline: Wednesday, June 7, 2006

Registration and the preliminary program for these conferences are
available at:
 http://www.siam.org/meetings/an06/index.php
 http://www.siam.org/meetings/fm06/index.php
 http://www.siam.org/meetings/pd06/index.php

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

From: "Prof. Heinz W. Engl" <heinz.engl@jku.at>
Subject: PhD Position: inverse problems in biophysics
Date: Mon, 8 May 2006

We have a funded PhD Position for 3 years (available immediately) in a
joint doctoral college with biophysicists. The position is at the
Radon Institute for Computational and Applied Mathematics of the
Austrian Academy of Sciences (www.ricam.oeaw.ac.at), information about
the project can be found below or via www.wissen.jku.at/mobaindex.htm

We are looking for a mathematician (with a master's degree) with an
interest in inverse problems keen to work in an interdisciplinary
environment with biologists; the main task is to do PhD research, but

there is also some coursework introducing the student to relevant
fields of biophysics.

Expressions of interest with relevant information by EMail to

heinz.engl@jku.at

Prof.Dr.Heinz W. Engl   E-Mail: heinz.engl@jku.at
Institut fuer Industriemathematik secretary: doris.nikolaus@jku.at
Johannes-Kepler-Universitaet   Phone:+43-(0)732-2468...,ext.9219 or
8693,
Altenbergerstrasse 69   secretary: ext.9220
A-4040 Linz   Fax:ext. 8855
                        Oesterreich / Austria
   World Wide Web: http://www.indmath.uni-linz.ac.at/
                              and
Johann Radon Institute for Computational and Applied Mathematics (RICAM),
Austrian Academy of Sciences; http://www.ricam.oeaw.ac.at
                    EMail: heinz.engl@oeaw.ac.at
Mobile Phone: +43-(0)664-5209029 Mobile Fax: +43-(0)664-5274338

The Ph.D. Programme

Molecular Bioanalytics:
From molecular recognition to membrane transport (MoBA)

The interdisciplinary graduate research programme involves the
Institutes of Biophysics, of Analytical Chemistry, of Applied Physics,
of Organic Chemistry, and of Theoretical Physics from the
Johannes-Kepler-University Linz (JKU), the Johann Radon Institute for
Computational and Applied Mathematics from the Austrian Academy of
Sciences, and the Upper Austrian Research. It is designed to span the
gap between the processes of molecular recognition and of molecular
membrane transport. The first part is complementary to the
GENAU-research network at the JKU Ultra-sensitive proteomics and
genomics, whereas the second part is generated by a long tradition of
membrane transport research at the JKU. The scientific goal of the
graduate programme is to gain insight into the molecular picture (1)
of how molecules are recognised on the membrane surface and (2) of how
they are conveyed across membrane proteins. The investigations of
carriers (sodium-glucose transporter), nuclear pores, as well as water
and ion channels (AQPs and TRP-channels) involved in molecular
recognition and membrane transport are going to profit from the
development of new bioanalytical methods (thin piezo-electrical film
transducers, cell-microarrays, molecular imprinted polymers,
high-throughput multi-parameter microscopy). Well established
analytical techniques with a resolution covering the whole scale from
single molecules to molecular ensembles provide a solid basis for the
Molecular Bioanalytics (MoBA) programme. The latter is part of the
interdisciplinary priority network BioSystem Analysis at the JKU and
is designed to provide Austrian and international students with
excellent opportunities for multi-disciplinary studies at the edge
between physics, medicine, biology and chemistry. Its curriculum
comprises a series of lectures in Single Molecule Techniques, in
Bioanalysis of Molecular Ensembles and in Biomolecular Techniques
which is supplemented by practical courses. In addition, the students
will have the opportunity to attend rhetoric courses, courses in
presentation techniques and knowledge transfer. The guidelines of the
programme include participation in the annual Single Molecules

workshop held in Linz and a yearly meeting (Summer school) between the
student and the entire faculty. Funding by the programme enables
Ph.D. students (i) to attend national and international conferences
and (ii) to spend one semester in a foreign laboratory. Combined with
research at the frontiers of life science, the programme will be
applicable to many scientific and technological fields related to
biophysics, applied physics, bioorganic chemistry, structural and
molecular biology, mathematical modelling, and scientific computing
giving the Ph.D. student lifelong flexibility for continued
professional growth.

Direct and Inverse Modeling and Simulation of Transport in Membranes and
Water Channels

ENGL Heinz/BURGER Martin/KÃ��¿½LER Philipp

In this project, we plan to develop models and simulations of water
transport through membranes and channels that should allow
quantitative predictions in realistic situations. The models will be
based on partial differential equations and solved numerically by
finite element methods.

Using these models, the second aim is to determine structural
properties of membranes and channels using available indirect
measurements in adjacent water layers. The mathematical formulation of
these inverse problems leads to parameter identification in systems of
partial differential equations, which will be solved by regularization
methods.

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: PhD positions in inverse problems
Date: Thu, 25 May 2006

PhD Positions in inverse problems in x-ray tomography and mutual
inductance tomography

We are hoping to recruit mathematics graduates to study for a PhD in
inverse problems in collaboration with scientists and engineers in the
application areas. One project involves limited angle x-ray
tomography reconstruction in material science and would be
co-supervised by myself in the School of Mathematics and Prof Withers
in the School of Materials here at the University of Manchester. EPSRC
funding covers fees and stipend for a UK or EU national. We also
expect to have similar funding to work on three-dimensional
reconstruction algorithms for X-ray CT applied to airport security,
and another project on mutual induction tomography for (non-medical)
applications.

The successful candidates will be expected to have a good mathematics
degree and experience in implementation of numerical algorithms. If
you are interested please email me with your CV and any questions you
may have.

Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.maths.manchester.ac.uk/~bl/

From: Eric Miller <elmiller@ECE.NEU.EDU>
Subject: Post doc in ultrasonic imaging, Northeastern University
Date: Thu, 25 May 2006

It is anticipated that a postdoctoral position in the area of
ultrasonic imaging will be available in the Department of Electrical
and Computer Engineering at Northeastern University in Boston MA USA
starting in mid-summer of 2006. The ideal candidate will have a PhD in
an area such as acoustics, electrical engineering, mechanical
engineering or physics with experience in algorithms development for
imaging/inverse problems and experimental data collection and
processing.

The objective of the work here is the development, and implementation
using commercial instrumentation, of a new approach by which
ultrasonic imaging can be used to guide high intensity focused
ultrasound (HIFU) treatment of cancer. HIFU has shown considerable
promise in recent years as a hyperthermia-based tool for successfully
treating a range of cancers. HIFU is limited however by difficulties
in non-invasively monitoring the progress of the treatment to control
the size, shape, and extent of the thermal lesion. We currently
employs a model-based approach to the problem of lesion
characterization wherein the data collected by the imaging transducer
are used to estimate parameters directly related to the size, shape,
location, orientation, and contrast of the HIFU-induced lesion. The
foci of the current project include: 1/ more extensive phantom and ex
vivo experimental evaluation of our current technology; 2/ the
development and experimental evaluation of new imaging methods capable
of addressing HIFU monitoring scenarios including multi-lesion imaging
and tracking of lesion formation; and 3/ initial implementation of all
methods to state-of-the-art hardware platforms for eventual use in
real-time treatment monitoring.

The project is expected to last two years. Appointment for this job
will be on a year-by-year basis.

For more information about this position, please contact
Prof. Eric Miller
Dept. of Electrical and Computer Engineering
315 Stearns Center
Northeastern University
360 Huntington Ave
Boston MA 02115
email: elmiller@ece.neu.edu
Web: http://www.ece.neu.edu/faculty/elmiller/elmhome/

Interested candidates should provide (preferably via email) Prof.
Miller with a copy of their CV, list of references, and copies of
relevant articles, theses, technical reports etc.

Northeastern University is an Equal Opportunity/Affirmative Action,
Title IX, educational institution and employer and particularly
welcomes applications from minorities, women and persons with
disabilities. Go to www.neu.edu/hrm for more information.

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents list for Inverse Problems
Date: Mon, 22 May 2006

Inverse Problems   June 2006   Volume 22, Issue 3
                      Table of Contents

All articles are free for 30 days after publication on the web. This
issue is available at: http://stacks.iop.org/IP/22/i=3D3

Approximate solution of a Cauchy problem for the Helmholtz equation
T Regi\'nska and K Regi\'nski

New families of exact fan-beam and cone-beam image reconstruction
formulae via filtering the backprojection image of differentiated
projection data along singly measured lines   T Zhuang

A framework for studying the regularizing properties of Krylov
subspace methods   P Brianzi, P Favati, O Menchi and F Romani

The inverse source problem for Maxwell's equations
R Albanese and P B Monk

Truncated Hilbert transform and image reconstruction from limited
tomographic data   M Defrise, F Noo, R Clackdoyle and H Kudo

Detection of small inclusions by elastography
J Fehrenbach, M Masmoudi, R Souchon and P Trompette

On inverse doping profile problems for the stationary voltage--current
map   A Leit\~ao, P A Markowich and J P Zubelli

Detection of irregular points by regularization in numerical
differentiation and application to edge detection
X Q Wan, Y B Wang and M Yamamoto

Convergence of projected iterative regularization methods for
nonlinear problems with smooth solutions
B Kaltenbacher and A Neubauer

Nonlinear Analysis: Modelling and Control   2006 Vol. 11, No. 2
                    Table of Contents

On a Nonlinear System of Reaction-Diffusion Equations
G.A. Afrouzi, S.H. Rasouli

The SVD-Fundamental Theorem of Linear Algebra
A.G. Akritas, G.I. Malaschonok, P.S. Vigklas

Circle and Popov Criterion for Output Feedback Stabilization of
Uncertain Systems   A. Benabdallah, M.A. Hammami

Discrete Multistage Optimization and Hierarchical Market
V.J. Bistrickas, N. Simeliene

Stability of Nuclear Reactor: Point Model Analysis
K. Bucys, D. Svitra

Persistence and Stability of a Food Chain Model with Mixed Selection
of Functional Responses   A. Maiti, B. Patra, G.P. Samanta

On Nonlinear Vekua Type Equations   S.V. Rogosin

Lie Group Analysis of Natural Convection Heat and Mass Transfer in an
Inclined Surface
S. Sivasankaran, M. Bhuvaneswari, P. Kandaswamy, E.K. Ramasami

Nonlinear Analysis: Modelling and Control, an official journal of the
Lithuanian Association of Nonlinear Analysts (LANA), welcomes
contributions from the international community.

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

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

From: "magrijn-secretary support" <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Mon, 10 Apr 2006

Mathematics of Control, Signals, and Systems 2006 Vol. 18, No. 1
                    Table of Contents

Normalized doubly coprime factorizations for infinite-dimensional
linear systems   R.F. Curtain and M.R. Opmeer

Convergence analysis of central and minmax algorithms for models with
one unknown parameter   H. Akcay and N. At

Global complete observability and output-to-state stability imply the
existence of a global convergent observer   A. Astolfi and L. Praly

INFORMATION
The tables of contents of MCSS and the .pdf files of its papers are
available from the publisher Springer at:
  http://link.springer.de/link/service/journals/00498/index.htm

Information on MCSS is available also at the Editors' home pages:
  www.cwi.nl/~schuppen/mcss/mcss.html
  www.math.rutgers.edu/~sontag/mcss.html

All submissions (papers to be offered to MCSS for publication)
are to be sent via the web as of 1 January 2006
 <http://mcss.edmgr.com/> http://mcss.edmgr.com
then login (ask for a password on the first visit)

For assistance with the login procedure or the web page contact
Mr. Harvey Gocuay of Springer   Harvey.Gocuay@springer.com

Eduardo D. Sontag and Jan H. van Schuppen (Editors)

Submitted by: Corry Magrijn (Secretary) for Jan H. van Schuppen
(Editor-in-Chief MCSS)

```
----------------------------
From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Thu, 25 May 2006
```

Linear Algebra and its Applications   1 July 2006   Vol. 416, Issue 1
                        Table of Contents

Special Issue devoted to the Haifa 2005 conference on matrix theory
Edited by Abraham Berman, Leonid Lerer and Raphael Loewy

http://www.sciencedirect.com/science/issue/5653-2006-995839998-623403

Submitted by: Hans Schneider

Mathematics Department, Van Vleck Hall, University of Wisconsin,
480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans
------- end -------

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: Applied Inverse Problems Conference AIP 2007
Date: Tue, 18 Jul 2006

                  First Announcement

The Applied Inverse Problems Conference in 2007 (AIP 2007) will be
held at the University of British Columbia campus in Vancouver,
Canada, June 25-29, 2007. This conference is the fourth in the series
that started in Montecatini, Italy, in 2001. For more information on
the AIP conferences and the one in Vancouver one see the web page
http://www.pims.math.ca/science/2007/07aip/

This is a call for minisymposia for the meeting. Please include in the
proposal a title for the minisymposia, the organizer(s), a description
of the topics to be discussed at the minisymposia as well as a list of
possible speakers. Please send your submission to Gunther Uhlmann
(gunther@math.washington.edu) by November, 30, 2006.

Gunther Uhlmann
(Chair Organizing Committee AIP 2007)

From: "Inverse Problems Design and Optimization Symposium 2007"
<ipdo2007@gmail.com>
Subject: Inverse Problems Design and Optimization Symposium 2007
Date: Mon, 24 Jul 2006

International Symposium on

INVERSE PROBLEMS, DESIGN AND OPTIMIZATION (IPDO-2007)

Miami Beach, Florida, U.S.A., April 16-18, 2007.

IPDO Symposium's main objectives are to bring the three communities of researchers (inverse problems experts, design theory experts, and optimization experts) together and provide a common forum for presenting different applications, problems, and solution strategy concepts. These three areas of research to be covered by the IPDO Symposium have a number of things in common. For example, many methodologies for solving inverse problems employ optimization algorithms. But, there are no optimization algorithms that employ methods of inverse design that could potentially substantially reduce the number of time-consuming analysis required by the typical evolutionary optimization algorithms. Similarly, design theory is not well known in the optimization community where formulation of the appropriate multiple objectives and system-of-systems design formulations are often performed using intuition and personal experience. The IPDO Symposium thus offers a unique international forum that is expected to provide an excellent basis for cross-fertilization of ideas and creation of new synergistic approaches and methodologies that will combine the three fields of research so that more general, robust, accurate and computationally economical design methods are created for multi-disciplinary applications.

Organizers:

G.S. Dulikravich (chair), H.R.B. Orlande (co-chair), M. Tanaka (co-chair),
M.J. Cola=E7o (secretary)

Sponsors:

AFOSR (United States Air Force Office of Scientific Research)
ARO (United States Army Research Office)
T&F (Taylor & Francis Publishers)
FIU (Florida International University)
UFRJ (Federal University of Rio de Janeiro)

Areas of interest:

The IPDO-2007 Symposium will emphasize a broad range of deterministic, statistical, analytical, computational and experimental approaches, which can be applied to the solution of inverse, design and multi-disciplinary optimization problems. Contributions dealing with theoretical concepts and practical applications are encouraged, such as in petrochemistry, aeronautics, astronautics, bio-medicine, transport and sensing of pollutants, materials design and processing, remote sensing, non-destructive evaluation, material property determination, acceleration of large scale optimization, design theory, etc.

Deadlines:

1 October, 2006   proposals for organizing technical sessions
                     (minimum six papers per session)

1 November, 2006   deadline for submission of two-page abstracts in
                     .pdf format

1 December, 2006   informing authors about acceptability of abstracts

1 February, 2007   deadline for submission of full eight-page papers

1 March, 2007   deadline for early registration

Abstracts and papers:

Please submit two-page abstracts (including preliminary results, basic figures, formulas, and references) in .pdf format to the following e-mail addresses:

    IPDO2007@GMAIL.COM
    IPDO2007@YAHOO.COM

(The templates can be found at the symposium website).

All accepted abstracts will be in a Book of Abstracts provided to all participants during IPDO-2007. Final papers passing a three-person review process will be provided electronically to all those that register by April 1, 2007 and will be published in Inverse Problems in Science and Engineering journal free of charge.

IPDO-2007 Web Page:

  http://ipdo.freeshell.org/ipdo2007

For information contact: George S. Dulikravich; tel. +1 (305) 348-7016; E-mail: dulikrav@fiu.edu

If you don't want to receive any additional information about IPDO, please, send an email to <mailto:ipdo2007@gmail.com> ipdo2007@gmail.com with the word "unsubscribe" in the subject.

From: "Connie Young" <Young@siam.org>
Subject: SIAM Conference on Computational Science & Engineering
Date: Mon, 3 Jul 2006

SIAM Conference on Computational Science & Engineering
February 19-23, 2007
Hilton Orange County/Costa Mesa, Costa Mesa, California

The minisymposium deadline has been extended to August 23, 2006!

To submit go to http://meetings.siam.org/start.cfm?CONFCODE=3Dcs07

DEADLINES
August 23 , 2006: Minisymposium proposals
August 23 , 2006: Abstracts for contributed and minisymposium presentations
Deadlines are midnight Eastern Daylight Time (EDT.)

For more information visit http://www.siam.org/meetings/cse07/ or contact the SIAM Conference Department at meetings@siam.org <mailto:meetings@siam.org > .

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: SIAM Conference on Nonlinear Waves and Coherent Structures
Date: Tue, 20 Jun 2006

Conference Name: SIAM Conference on Nonlinear Waves and Coherent
Structures

Location: University of Washington, Seattle, Washington

Dates: September 9-12, 2006

Invited Plenary Speakers:
Fr����d����ric Dias, ENS, France
Benjamin J. Eggleton, University of Sydney, Australia
Mariana Haragus, Universit���� de Franche-Comt����, France
Lene Hau, Harvard University
Philip K. Maini, University of Oxford, United Kingdom
James McWilliams, University of California, Los Angeles
Bj����rn Sandstede, University of Surrey, United Kingdom

Registration is Now Available!

Hotel Reservation Deadline: July 8, 2006
Pre-Registration Deadline: August 9, 2006

Registration and the preliminary program for this conference are
available at: http://www.siam.org/meetings/nw06/

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

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: SIAM Conference on Applications of Dynamical Systems
Date: Wed, 26 Jul 2006

Subject: SIAM Conference on Applications of Dynamical Systems (DS07)
          CFP Deadlines

Conference Name: SIAM Conference on Applications of Dynamical Systems
          (DS07)

Location: Snowbird Ski and Summer Resort, Snowbird, Utah

Dates: May 28-June 1, 2007

Invited Plenary Speakers:
Uri Alon, Weizmann Institute of Science, Israel
Iain Couzins, Oxford University, United Kingdom
George Haller, Massachusetts Institute of Technology
Hans Hermann, ETH Z=FCrich, Switzerland
Peter Imkeller, Humboldt University, Berlin, Germany
Natalia Komarova, University of California, Irvine
Arnd Scheel, University of Minnesota
Francisco Valero-Cuevas, Cornell University
Jane Wang, Cornell University

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/ds07/

                         Deadlines

Minisymposium proposals: October 30, 2006

Abstracts for all contributed and minisymposium presentations:
November 27, 2006

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

From: "Thomas I. Seidman" <seidman@math.umbc.edu>
To: ipnet
Subject: announcement -- SeidmanFest
Date: Sat, 8 Jul 2006
Message-ID: <44CE9ED6.9080801@math.msu.edu>

FYI: http://www.umbc.edu/seidman

Prof. Thomas I. Seidman   seidman@math.umbc.edu
UMBC --- Dept. Math/Stat   http://www.math.umbc.edu/~seidman
Baltimore, MD 21250
(1-410)-455-2438 [FAX: -1066]

From: Matthias Fuchs <matz.fuchs@uibk.ac.at>
Subject: Mathematical Doctorate Position
Date: Mon, 10 Jul 2006

At the Institute of Computer Science, University of Innsbruck, Austria

The Infmath-Imaging Group (http://infmath.uibk.ac.at) is looking for a
Doctorate Candidate interested in partial differential equations,
variational problems or inverse problems. The position is granted till
August 2008.

For more information contact Otmar Scherzer at otmar.scherzer@uibk.ac.at.

The institute is housed on the campus of the Technical Faculty of the
University of Innsbruck, a town of about 100.000, in the Austrian Alps.
Further information is available under: http://www.uibk.ac.at/ipoint/

Applications with personal and scientific data, copies of relevant
documents and a statement about scientific interests and achievements
should be sent, preferably by email, to otmar.scherzer@uibk.ac.at.

Postal address:
Dr. Otmar Scherzer
Institute of Computer Science, University of Innsbruck
Technikerstrasse 21a, A-6020 Innsbruck, Austria

From: Matthias Fuchs <matz.fuchs@uibk.ac.at>
Subject: PostDoc Position f/m
Date: Mon, 10 Jul 2006

At the Johann Radon Institute for Computational and Applied Mathematics
(RICAM) of the Austrian Academy of Sciences, Linz, Austria.

The Imaging Group is looking for a PostDoc Candidate interested in
partial differential equations, variational problems or inverse
problems. The research focus will be adjusted according to the interests
of the successful candidate. Possible specialization include all areas
of regularization and inverse problems in the context of life sciences

and material sciences.

A doctorate in mathematics or a closely related field is required. The working language is English. The initial contract will be till March 2008. For more information contact Otmar Scherzer at otmar.scherzer@uibk.ac.at.

RICAM is a research institute which went into operation on January 1, 2003, and is building up to a total of 30 PostDoc positions in six areas: Computational Methods for Direct Field Problems, Inverse Problems, Optimization and Optimal Control, Symbolic Computing, Analysis of Partial Differential Equations, Mathematical Finance.

The institute is housed on the campus of the Johannes Kepler University in Linz, a town of about 240.000 on the Danube, very close to the Austrian Alps, and half-way between Vienna and Salzburg. Further information is available under: http://www.ricam.oeaw.ac.at.

Applications with personal and scientific data, copies of relevant documents and a statement about scientific interests and achievements should be sent, preferably by email, to otmar.scherzer@uibk.ac.at.

Postal address:
Dr. Otmar Scherzer
Institute of Computer Science, University of Innsbruck
Technikerstrasse 21a, A-6020 Innsbruck, Austria.

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents, Inverse Problems
Date: Tue, 18 Jul 2006

Inverse Problems   August 2006   Volume 22, Issue 4
                    Table of Contents

TOPICAL REVIEW

Level set methods for inverse scattering   O Dorn and D Lesselier
(Multimedia files accompany this article)

PAPERS

Inverse problem in refractive index based optical tomography
T Khan and A Thomas

Inverse problems for the matrix Sturm--Liouville equation on a finite
interval   V Yurko

A direct imaging algorithm for extended targets
S Hou, K Solna and H Zhao

Solving inverse two-point boundary value problems using collage coding
H Kunze and S Murdock

Convergence analysis for finite element approximation to an inverse
Cauchy problem   A Chakib and A Nachaoui

Identification of a stratigraphic model with seismic constraints
J Blum, G Dobranszky, R Eymard and R Masson

Recovering inhomogeneities in a waveguide using eigensystem decomposition
S Dediu and J R McLaughlin

On decoupling of volatility smile and term structure in inverse option
pricing   H Egger, T Hein and B Hofmann

Numerical methods for coupled super-resolution
J Chung, E Haber and J Nagy

Notions of support for far fields   J Sylvester

Identification of source locations in two-dimensional heat equations
L Ling, M Yamamoto, Y C Hon and T Takeuchi

On Cauchy's problem: II. Completion, regularization and approximation
M Aza\" \i ez, F Ben Belgacem and H El Fekih

Fast imaging of partially conductive linear cracks using impedance data
K Bryan, J Haugh and D McCune

Cram\'er--Rao lower bounds for inverse scattering problems of
multilayer structures   M Gustafsson and S Nordebo

Regularized minimum {\em I}-divergence methods for the inverse
blackbody radiation problem   K Choi, A D Lanterman and J Shin

Adaptive interferometric imaging in clutter and optimal illumination
L Borcea, G Papanicolaou and C Tsogka

Resolution and denoising in near-field imaging
G Derveaux, G Papanicolaou and C Tsogka

Inverse spectral problem for singular Ablowitz--Kaup--Newell--Segur
operators on [0, 1]   F Serier

Efficient determination of the most favoured orientations of protein
domains from paramagnetic NMR data
M Longinetti, C Luchinat, G Parigi and L Sgheri

COMMENT AND REPLY

Comment on `Studies on Palamodov's algorithm for cone-beam CT along a
general curve'   V Palamodov

Reply to the comment on `Studies on Palamodov's algorithm for
cone-beam CT along a general curve'   H Yu, Y Ye, S Zhao and G Wang

CORRIGENDUM

On the relation between constraint regularization, level sets and
shape optimization   A Leit\~ao and O Scherzer

All articles are free for 30 days after publication on the web. This
issue is available at: http://stacks.iop.org/IP/22/i=3D4

Fax: +44 (0)117 929 4318   WWW: http://www.iop.org

From: IJTS@yahoogroups.com
Subject: Contents, International Journal of Tomography & Statistics
Date: Mon, 12 Jun 2006

Dear Colleague,

Greetings from International Journal of Tomography & Statistics (IJTS).

The Summer Issue of IJTS is ready and available by first week of July
2006 as "paper print issue" and "electronic issue". The
online/electronic issue of journal is in the final form and is
identical to what you will see the paper print journal.

The Content and Abstract of this issue can be view on www at:

  Content: http://www.isder.ceser.res.in/ijts/cont/ijts-s06-cont.html
  Abstract: http://www.isder.ceser.res.in/ijts/cont/ijts-s06-abs.html

With regards,

Dr. Tanuja Srivastava

Executive Editor,
International Journal of Tomography & Statistics (IJTS)
http://www.isder.ceser.res.in/ijts.html

From: Hans Schneider <hans@math.wisc.edu>
Subject: Contents, Linear Algebra and its Applications
Date: Sun, 30 Jul 2006

Linear Algebra and its Applications   1 Sept. 2006 Vol. 417, Issues 2-3

Special Issue in honor of Friedrich Ludwig Bauer

Edited by Heike Fassbender, Michael Griebel, Olga Holtz, G.W. (Pete)
Stewart and Christoph Zenger

Curriculum vitae of Friedrich Ludwig Bauer
Heike Fassbender, Michael Griebel, Olga Holtz, G.W. (Pete) Stewart and
Christoph Zenger

Cache oblivious matrix multiplication using an element ordering based
on a Peano curve   Michael Bader and Christoph Zenger

Multigrid methods for anisotropic BTTB systems
Rainer Fischer and Thomas Huckle

Is there a small skew Cayley transform with zero diagonal?
W. Kahan

Another orthogonal matrix   B.N. Parlett and E. Barszcz

The spectral radius in partially ordered algebras
Thomas I. Seidman and Hans Schneider

Singular value decomposition Gersgorin sets

Laura Smithies and Richard S. Varga

Accurate SVDs of polynomial Vandermonde matrices involving orthonormal polynomials   James Demmel and Plamen Koev

On Ritz approximations for positive definite operators I (theory)
Luka Grubisic and Kresimir Veselic

The periodic QR algorithm is a disguised QR algorithm
Daniel Kressner

Quadratic convergence estimate of scaled iterates by J -symmetric Jacobi method   J. Matejas and V. Hari

Relative residual bounds for indefinite Hermitian matrices
Ninoslav Truhar and Ivan Slapnicar

A quadratically convergent QR-like method without shifts for the Hermitian eigenvalue problem
Hongyuan Zha, Zhenyue Zhang and Wenlong Ying

http://www.sciencedirect.com/science/issue/5653-2006-995829997-628786

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall, University of Wisconsin, 480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402   Email: hans@math.wisc.edu
Math Dept Phone: 608-263-3054   http://www.math.wisc.edu/~hans
------- end -------

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

Today's Topics:
      Symposium on Inverse Problems honoring Alberto Calderon
      Inverse Problems 2007 Symposium
      SIAM Conference on Computational Science & Engineering: Deadlines
      Faculty Position in Inverse Problems, Imaging Science, Data
Analysis
      Radon ICIAM Grants
      PhD Studies in Inverse Problems of Medical Imaging
      Book: Dynamical Systems Method for Solving Operator Equations
      Announcing new journal: Computational Science & Discovery
      Special ETNA volume dedicated to Gene Golub
      Special LAA Issue on Models/Algorithms in IM Radiation Therapy
      Special LAA issue on the Joint Spectral Radius
      Online version of International Journal of Tomography & Statistics
      Table of Contents: Inverse Problems in Science and Engineering
      Table of Contents: Linear and Multilinear Algebra

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.math.msu.edu/ipnet

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: Symposium on Inverse Problems honoring Alberto Calderon
Date: Sat, 5 Aug 2006

This is the first announcement for the Symposium on Inverse Problems
Honoring Alberto Calderon to be held in IMPA, Rio de Janeiro, Brazil,
January 10 to 19, 2007. Please see the web page for more details:
http://www.math.purdue.edu/~sabarre/sympinv.html

We encourage Students and Junior Scientists from the US to apply for
financial support. Please follow the instructions in the web page to
do so.

Antonio Sa Barreto Gunther Uhlmann

From: Neil Wright <ntwright@egr.msu.edu>
Subject: IPS 2007
Date: Mon, 28 Aug 2006

2007 Inverse Problems Symposium

June 11 & 12, 2007

Michigan State University

East Lansing, Michigan, USA

This is the 20th in the series of National and International Meetings

on Inverse Problems that were initiated at Michigan State University in 1988. The new name reflects the breadth of research of the attendees to these symposia. Papers are solicited from all areas involving inverse methods and their applications. The symposium is organized in a single session format to foster cross-disciplinary interaction. Solicited topics are listed at the symposium website

www.inverseproblems2007.org <http://www.inverseproblems2007.org>

Honorary Chairperson:
James V. Beck, Professor Emeritus, Michigan State University

For more information, please contact:
Conference Chairperson: /Neil Wright, Department of Mechanical Engineering, Michigan State University, East Lansing, MI, 48864; phone: (517) 432-4917;
email: ntwright@msu.edu

From: Connie Young <Young@siam.org>
Subject: SIAM CSE07 Submission Deadline August 23, 2006
Date: Thu, 17 Aug 2006

SIAM Conference on Computational Science & Engineering (CSE07)
February 19-23, 2007
Hilton Orange County/Costa Mesa, Costa Mesa, California

The submission deadline for CSE07 is fast approaching!

To submit go to _http://meetings.siam.org/start.cfm?CONFCODE=cs07_

DEADLINES

August 23 , 2006: Minisymposium proposals
August 23 , 2006: Abstracts for contributed and minisymposium presentations

Deadlines are midnight Eastern Daylight Time (EDT.)

For more information visit _http://www.siam.org/meetings/cse07/_ or contact the SIAM Conference Department at _meetings@siam.org_ <mailto:meetings@siam.org%20>.

From: Elena Karn <ekarn@math.ucdavis.edu>
Subject: Faculty Position in Inverse Problems, Imaging Science, Data Analysis
Date: Wed, 09 Aug 2006

The Department of Mathematics at the University of California, Davis, is soliciting applications for a tenure-track assistant professor position starting July 1, 2007, subject to budgetary and administrative approval.

We are interested in applicants in the following areas: High Dimensional Data Analysis, Inverse Problems, and/or Imaging Science. This position is associated with the campus-wide initiative Universe@UCDavis. The candidates are expected to contribute to the multidisciplinary Universe@UCDavis project through their own research

and the collaboration with the project team on innovative data mining
and machine learning techniques for exploration and discovery with
extremely large cosmological datasets.

Minimum qualifications for this position include a Ph.D. degree or its
equivalent in the Mathematical Sciences, and great promise in research
and teaching. Duties include mathematical research, undergraduate and
graduate teaching, and departmental and university service.

Additional information on the Department may be found at
http://math.ucdavis.edu/. Our postal address is Department of
Mathematics, University of California, One Shields Avenue, Davis, CA
95616-8633.

Applications will be accepted until the position is filled. To receive
full consideration, the application should be received by December 1,
2006. To apply, submit the AMS Cover Sheet and supporting
documentation electronically through http://www.mathjobs.org/.

The University of California, Davis, is an affirmative action/equal
opportunity employer.

Submitted by: Elena Karn, Academic Personnel Coordinator,
Department of Mathematics, UC Davis, One Shields Ave, Davis, CA 95616
530-752-4887   fax 530-752-6635

From: Prof. Heinz W. Engl <heinz.engl@jku.at>
Subject: Radon ICIAM Grants
Date: Thu, 10 Aug 2006

Radon - ICIAM - Grants

The Johann Radon Institute for Computational and Applied Mathematics
        (RICAM) of the Austrian Academy of Sciences

announces up to 10 grants which cover the cost of

    * a stay of two weeks at RICAM in Linz right before ICIAM 07.
    * the stay at ICIAM 07 in Zurich.

Travel (as cheap as possible), registration to ICIAM and accommodation
and subsistence in Linz and Zurich are covered by these grants.

Applications are invited from mathematicians born 1971 or later, who
live and work in Central and Eastern Europe including those
EU-Countries that joined the Union in 2005. Preference is given to
applicants whose scientific expertise is close to the fields
represented at RICAM.

Applications should be sent by September 30, 2006 to
radon_iciam@ricam.oeaw.ac.at.

These applications should include a short statement about scientific
interests and achievements, a CV and a list of publications. Also, two
letters of support should directly be sent to the e-mail address
given.

Successful candidates will be notified around October 15, 2006 and
should then submit an abstract to ICIAM. The grant will only be

awarded if this abstract is accepted for presentation.

Submitted by:
Prof.Dr.Heinz W. Engl   E-Mail: heinz.engl@jku.at
Institut fuer Industriemathematik secretary: doris.nikolaus@jku.at
Johannes-Kepler-Universitaet   Phone:+43-(0)732-2468...,ext.9219 or
8693,
Altenbergerstrasse 69   secretary: ext.9220
A-4040 Linz   Fax:ext. 8855
                    Oesterreich / Austria
            World Wide Web: http://www.indmath.uni-linz.ac.at/
                              and
Johann Radon Institute for Computational and Applied Mathematics (RICAM),
Austrian Academy of Sciences; http://www.ricam.oeaw.ac.at
                    EMail: heinz.engl@oeaw.ac.at

From: Peter Kuchment <kuchment@math.tamu.edu>
Subject: PhD Studies in Inverse Problems of Medical Imaging
Date: Wed, 16 Aug 2006

PhD studies opportunities in inverse problems of medical imaging at
Department of Mathematics of Texas A&M University

Professors Peter Kuchment (http://www.math.tamu.edu/~kuchment) and
Wolgang Bangerth (http://www.math.tamu.edu/~bangerth/) at the
Department of Mathematics of Texas A&M University are starting an NSF
supported research project devoted to mathematical methods of novel
modalities of medical imaging (so called computerized
tomography). This exciting project will address the practically
important problems of medical imaging that require significant
mathematical and numerical analysis. The problems of tomography are
known for bringing about beautiful analytic and numerical mathematics
(harmonic analysis, function theory, differential equations, etc.),
and we are sure that this project will not be an exception.

It is planned to involve several graduate students into the project.
Interested students should contact Professors Peter Kuchment and/or
Wolfgang Bangerth.

One can find the enrollment procedures and requirements for our
graduate program at http://www.math.tamu.edu/teaching/graduate/

Peter Kuchment, Professor
Mathematics Department
Texas A&M University
College Station, TX 77843-3368
http://www.math.tamu.edu/~kuchment
e-mail kuchment@math.tamu.edu
(979)862-3257, FAX (979)862-4190

From: Prof. Alexander G.Ramm <ramm@math.ksu.edu>
Subject: Book: Dynamical Systems Method for Solving Operator Equations
Date: Wed, 30 Aug 2006

Dear Colleagues:
Below is information about my new monograph.

Kind regards,

Alexander Ramm

From: M&CS books department <books-mcs@elsevier.com>
Subject: RE: Ramm's book "Dynamical Systems Method for Solving Operator
Equations"

The book can be ordered now:
http://elsevier.com/wps/find/bookdescription.cws_home/710057/description#
description

From: Emma Bartovsky <Emma.Bartovsky@iop.org>
Subject: Announcing new journal: Computational Science & Discovery
Date: Thu, 24 Aug 2006

Computational Science & Discovery (CSD) is a new journal from
Institute of Physics Publishing, and is now accepting submissions.

CSD will focus on scientific advances and discovery through
computational science in physics, chemistry, biology and applied
science - its multidisciplinary breadth being a unique asset. Within
their papers, authors will be encouraged to include details of the
scientific advances made, their numerical methods, verification and
validation of codes, and the enabling technologies they used - for
example, in data management, networking and visualization, among other
areas.

Papers will be rigorously peer-reviewed and published
electronically. To find out more about the journal, including author
guidelines, and members of the growing Editorial Board, please visit
http://iop.org/journals/csd or contact csd@iop.org. The journal will
be available free online during 2006 and 2007.

From: Lothar Reichel <reichel@math.kent.edu>
Subject: Special ETNA volume dedicated to Gene Golub
Date: Sun, 27 Aug 2006

                    FIRST CALL FOR PAPERS
           SPECIAL VOLUME IN HONOR OF GENE H. GOLUB
             ON THE OCCASION OF HIS 75th BIRTHDAY

ETNA, the Electronic Transactions on Numerical Analysis
(http://etna.mcs.kent.edu), is planning a special volume in
honor of Gene H. Golub on the occasion of his 75th birthday.
The special editors for this volume are:

Martin Gutknecht, Michael Overton, Lothar Reichel,
Daniel Szyld, Nick Trefethen, Paul Van Dooren, and Andy Wathen.

Papers can be submitted following the general ETNA
guidelines found on ETNA's web site (http://etna.mcs.kent.edu),
to any of the special editors, no later than February 29, 2007.
The papers will undergo the standard refereeing process.

From: Hans Schneider <hans@math.wisc.edu>
Subject: Special LAA Issue on Models/Algorithms in IM Radiation Therapy
Date: Tue, 8 Aug 2006

LINEAR ALGEBRA AND ITS APPLICATIONS
Special Issue on
LINEAR AND NONLINEAR MODELS AND ALGORITHMS IN
INTENSITY-MODULATED RADIATION THERAPY (IMRT)

Second call for Papers with extended submission deadline

Linear Algebra and its Applications (LAA) is pleased to announce a
special issue on "Linear and Nonlinear Models and Algorithms in
Intensity-Modulated Radiation Therapy (IMRT)".

IMRT is revolutionizing radiation therapy by putting at the disposal
of the medical profession powerful tools to deliver higher radiation
doses to tumors and lower radiation doses to critical organs in more
accurate ways. The scientific effort is a multidisciplinary one in
which radiation oncologists, other medical specialists, medical
physicists, mathematicians, computer scientists and engineers
collaborate to study many outstanding problems in treatment planning
and delivery. The goal is to merge this expertise and discover IMRT
solutions that can produce meaningful benefits to patients and
consistent results to practitioners. In view of the ever-increasing
role of mathematics, particularly linear algebra, optimization theory,
operations research, and other applied branches in IMRT, we look
forward to first-class original research submissions on all relevant
aspects of IMRT, including image-guided radiation therapy (IGRT) which
uses online imaging capabilities to reduce uncertainties in organ
localization and allows response to changes in treatment geometry over
time.

We welcome papers for the special issue within the entire scope of
IMRT; topics of interest include, but are not limited to:

    Algorithm engineering
    Aperture weight optimization
    Automated structure delineation
    Column-generation methods for large problem formulations
    Dose-volume constraints handling
    Gantry angle optimization
    Image-guided radiation therapy (IGRT)
    Large-scale matrix reduction and sparsing techniques
    Mathematical programming and operations research methods in IMRT
    Optimization of the segmentation process
    Rigid and deformable registration
    Sensitivity analysis for revised constraints or changed geometry
    Sampling techniques over constrained volumes
    Variance at risk methods for dose-volume modeling

The deadline for submission of papers is November 30, 2006. Papers
should be sent to any one of the four special editors, listed below,
preferably PDF files as attachments to e-mail, and will be subject to
normal refereeing procedures according to LAA standards. Go to:
http://authors.elsevier.com/JournalDetail.html?PubID=522483&Precis=&popup
=
and click on: "Guide for Authors" (but do not use the online
submission for this special issue).

Yair Censor, D.Sc.
Department of Mathematics, University of Haifa, Mt. Carmel, Haifa
31905, Israel.
yair@math.haifa.ac.il

James M. Galvin, D.Sc.
Department of Radiation Oncology, Thomas Jefferson University
111 South 11th Street, Philadelphia, PA. 19107, USA.
james.galvin@mail.tju.edu

Mark Langer, MD
Department of Radiation Oncology, Indiana University School of Medicine
535 Barnhill Dr., RT-041, Indianapolis, IN. 46202, USA.
mlanger@iupui.edu

Ying Xiao, Ph.D.
Department of Radiation Oncology, Thomas Jefferson University
111 South 11th Street, Philadelphia, PA. 19107, USA.
ying.xiao@mail.tju.edu

The editor-in-chief responsible for this special issue is Hans Schneider.

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall,
University of Wisconsin, 480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans

From: Hans Schneider <hans@math.wisc.edu>
Subject: Special LAA issue on the Joint Spectral Radius
Date: Fri, 25 Aug 2006

                LINEAR ALGEBRA AND ITS APPLICATIONS
            Special issue on the JOINT SPECTRAL RADIUS

                        Second call for papers

The joint spectral radius is a measure of the maximal growth of
products of matrices taken from a set. Fuelled by applications in many
areas there has been intensive research on this topic over the last
two decades. This special issue aims to highlight the advances that
have been achieved in recent times and to generate a state of the art
account of the developments in algebraic and analytic theory of the
joint spectral radius, computational aspects and application areas.
Papers devoted to further subjects concerning long products of
matrices are also welcome.

Theoretical developments in the area have used methods from diverse
mathematical fields. Computational complexity theory has been used to
show that in general the joint spectral radius is hard to determine,
while convex analysis lies at the foundation of many results obtained
on analytic properties, and methods from ergodic theory can be used to
characterize the continuous time version of the joint spectral radius
in the framework of stochastic dynamical systems. In order to make
the broad scope of methods visible we encourage submissions from all
areas that have an impact on the understanding of the joint spectral
radius ranging from matrix analysis, numerical analysis, algebraic
theory of matrix semigroups, computational complexity theory,
stability theory of switched linear systems, spectral theory of
semigroups of matrices. Furthermore, long products of matrices play a
prominent role in certain areas in automata theory, iterated functions
systems and various other fields.

We note that depending on the authors the joint spectral radius is also known as the maximal Lyapunov exponent or Lyapunov indicator, the Bohl exponent or the exponential growth rate and we encourage the submission of papers that create links to fields where notions similar to the joint spectral radius are studied, e.g. papers on continuous time versions of the joint spectral radius and extensions to infinite dimensions.

The joint spectral radius has found numerous applications in diverse areas; e.g. it has been used in coding theory to express the capacity of certain channels, in the stability analysis of consensus algorithms, to quantify the smoothness of wavelets obtained via dilation equations, in combinatorial number theory, in probability to analyze the distributions of random power series, in stability analysis of switched linear systems, in approximation theory to verify the convergence of subdivision algorithms,and in the theory of fractals and attractors. We particularly invite papers that explore applications in these or other areas.

All papers submitted must meet the publication standards of Linear Algebra and its Applications and will be refereed in the usual way. They should be submitted to one of the special editors of this issue listed below by 31 December 2006. Submission via email by sending a ps or pdf file is encouraged.

Vincent Blondel
Department of Mathematical Engineering
Université catholique de Louvain
4 Avenue George Lemaitre
B-1348 Louvain-la-Neuve
Belgium
vincent.blondel@uclouvain.be

Micheal Karow
Department of Mathematics
Berlin University of Technology
Strasse des 17. Juni 136
10623 Berlin
Germany
karow@math.tu-berlin.de

Vladimir Protasov
Department of Mechanics and Mathematics
Moscow State University
Vorobyovy Gory
119992 Moscow
Russia
vladimir_protassov@yahoo.com

Fabian Wirth
The Hamilton Institute
NUI Maynooth
Maynooth, Co. Kildare
Ireland
fabian.wirth@nuim.ie

The responsible editor-in-chief of the special issue is:

Hans Schneider
Department of Mathematics

University of Wisconsin - Madison
Van Vleck Hall
480 Lincoln Drive
Madison, Wisconsin 53706
U.S.A.
email: hans@math.wisc.edu

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall,
University of Wisconsin, 480 Lincoln Drive, Madison, WI 53706-1313 USA
Office Phone: 608-262-1402
Math Dept Phone: 608-263-3054   Email: hans@math.wisc.edu
Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans

From: Int. J. Tomogr. Stat. <tanujfma@yahoo.com>
Subject: Online version of International Journal of Tomography &
Statistics
Date: Wed, 30 Aug 2006

Dear Colleague,

Greetings from International Journal of Tomography & Statistics (IJTS).
The Fall 2006 of International Journal of Tomography & Statistics
(IJTS) is ready. The "Online issue" will be available by second week
of September 2006 and "Paper Print Issue" by November 06.

The Online Content and Abstract of this issue can be view on www at :

    Content: http://www.isder.ceser.res.in/ijts/cont/ijts-f06-cont.html
    Abstract: http://www.isder.ceser.res.in/ijts/cont/ijts-f06-abs.html

An Announcement

Special volume of "International Journal of Tomography & Statistics"
on:
Ã�Control Applications of Optimisation - control and aeronautics,
optimal control, control of partial differential equations;
Vol. 5, No. W07, Winter 2007

Ã�Control Applications of Optimisation - applications of optimal
control, robust control and stabilization, applications in industry;
Vol. 6, No. S07, Summer 2007

Ã�Control Applications of Optimisation - optimisation methods,
differential games, time delay control systems, economics and
management; Vol. 7, No. F07, Fall 2007

The papers provide new developments in the interacting fields of
optimisation, control and system theory, including optimisation
methods, optimal control, differential games, stochastic optimisation,
numerical optimisation methods and their applications in control,
optimisation with uncertainties, multi-objective control and
optimisation, robust control and stabilisation, applications in
economics and management, and optimal PDE control. Both theoretical
and practical aspects are discussed. All papers have passed the
standard refereeing process.

Online Contents of Vol. 5, No. W07, Winter 2007 (Control Applications
of Optimisation - control and aeronautics, optimal control,

control of partial differential equations) can be view at:
http://www.isder.ceser.res.in/ijts/cont/ijts-w07-cont.html

The above volume contains some selected and highly reviewed papers
presented at the
13th IFAC Workshop on Control Applications of Optimisation, FRANCE
which was organized in Paris - Cachan, at the Ecole Normale Supérieure,
France, on April 26-28, 2006.
Organized by: the Ecole Normale Supérieure de Cachan (ENS Cachan); and
SEE (Société de l'Electricité, del'Electronique et des Technologies de
l'Information et de la Communication);
Sponsored by:
    IFAC Technical Committee on Optimal Control (TC 2.4);
    IFAC Technical Committee on Economics and Business Systems (TC 9.1);
    IFAC Technical Committee on Control Design (TC 2.1);
    IFAC Technical Committee on Discrete Event and Hybrid Systems (TC
    1.3);
and supported by CNRS, INRIA, CNAM, MENR, and IFP. The contributors
are from 25 countries.
With regards,

Dr. Tanuja Srivastava
Executive Editor, International Journal of Tomography & Statistics (IJTS)
Department of Mathematics,
Indian Institute of Technology
Roorkee-247667, INDIA,
www.isder.ceser.res.in/ijts.html
E-mail: ijts@isder.ceser.res.in, tanujfma@iitr.ernet.in

From: jamesverebeck@comcast.net
Subject: Contents, Inverse Problems in Science and Engineering
Date: Fri, 08 Sep 2006

Inverse Problems in Science and Engineering   June 2006   Vol. 14 No. 4
                    Table of Contents

Inverse problem of aircraft structural parameter identification:
application of genetic algorithms compared with artificial neural
networks
P. M. Trivailo, T. Gilbert, E. Glessich and D. Sgarioto

Inverse problem of aircraft structural parameter estimation: application
of neural networks
P. M. Trivailo, G. S. Dulikravich, D. Sgarioto and T. Gilbert

Optimization tools in the analysis of micro-textured lubricated devices
G. C. Buscaglia, R. F. Ausas and M. Jai

The inverse determination of aerodynamic loading from structural
response data using neural networks
P. M. Trivailo and C. L. Carn

Evolutionary optimization using a new radial basis function network and
the adjoint formulation
I. C. Kampolis, D. I. Papadimitriou and K. C. Giannakoglou

Inverse problems in magnetohydrodynamics: theoretical and experimental
aspects   F. Stefani, T. Gundrum, G. Gerbeth, U. Gunther and M. Xu

Transient inverse design of radiative enclosures for thermal
processing of materials   F. H. R. Franca and J. R. Howell

An inverse solution to functional brain mapping in language processing
using an eigensystem study
M. Cabrerizo, M. Adjouadi, M. Aybala and K. Nunez

****

Table of Contents

****

Table of Contents

Optimization of slender structures considering geometrical imperfections
M. Baitsch and D. Hartmann

3D direct inversion algorithm for electrical impedance underground
anomaly detection with dual reciprocity boundary element modeling
Y. Kagawa, W. Xu, Y. Zhao, T. Horikane, N. Wakatsuki and H. Totsuji

Aircraft parameter estimation using output-error methods
L. Carlos Sandoval Goes, E. Moreira Hemerly, Carlos de Oliveira
Maciel, W. Rios Neto, C. Braga Mendonca and J. Hoff

Parameter identification for a complex lead-acid battery model by
combining fuzzy control and stochastic optimization
G. Steiner and B. Schweighofer

Evaluation of heat transfer coefficients along the secondary cooling
zones in the continuous casting of steel billets
A. Santos, A. Garcia, C. R. Frick and J. A. Spim

Information for the September 2006 issue was also submitted by:
Katie Chandler, Publishing Editor, Applied Science Journals,
Taylor & Francis

From: <Katie.Chandler@tandf.co.uk>
Subject: Contents, Linear and Multilinear Algebra
Date: Thu, 3 Aug 2006

Linear and Multilinear Algebra   September 2006   Volume 54, No. 5
                       Table of Contents

Representations of /p/-groups with submultiplicative spectra
Marjeta Kramar

An estimate for the norm of a derivation on a norm ideal
Mohamed Boumazgour

The Picard iteration and its application
Xuzhou Chen, Robert E. Hartwig

Eigenvalues of products of matrices
Susana Furtado, Laura Iglesias, Fernando C. Silva

Orthogonality preserving bijective maps on real and complex projective
spaces   Leiba Rodman, Peter Semrl

Derivations of the intermediate Lie algebras between the Lie algebra
of diagonal matrices and that of upper triangular matrices over a
commutative ring   Dengyin Wang, Shikun Ou, Qiu Yu

Similarity of pairs of linear maps defined modulo a subspace
M&art1;Isabel Garcia-Planas

www.tandf.co.uk/journals <http://www.tandf.co.uk/journals>
Volume 54 Number 5/September 2006 of Linear and Multilinear Algebra is
now available on the journalsonline.tandf.co.uk web site at
http://journalsonline.tandf.co.uk
</exchweb/bin/redir.asp?URL=http://journalsonline.tandf.co.uk/link.asp?id
=LMU560H20415>.

Submitted by: Katie Chandler, Publishing Editor, Applied Science
Journals, Taylor & Francis
------- end -------

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

Today's Topics:
      Workshop: British Inverse Problems Society, Cardiff
      Conference: Scale-Space and Variational Methods in Computer Vision
      Conference: Composite Science and Technology
      SIAM Conference: Computational Science & Engineering
      Postdoc and PhD Positions: Helical Cone Beam X-ray Tomography
      Tenure-track Faculty Positions: Inverse Problems, etc.
      Table of Contents: Mathematics of Control, Signals, and Systems
      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

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: British Inverse Problems Society workshop 1st Nov 2006 Cardiff
Date: Thu, 14 Sep 2006

British Inverse Problems Society
LMS One-day Workshop on Inverse Problems
Cardiff University
Wednesday November 1st 2006

See http://www.maths.manchester.ac.uk/~bl/ukipws/pr200611.html for
links to location and further information

The British Inverse Problems Society is holding a one-day workshop
hosted by the School of Computer Science, University of Cardiff on
Wednesday Nov 1st 2006. We will meet at 12:00pm in the reception area
of the Queen's building for lunch.

Programme
The meeting will take place in Room C/2.07 in the School of Computer
Science, Queen's Buildings, 5 The Parade, Roath, Cardiff CF24 3AA

12:00pm Lunch.
 1:00pm M. Jais (Cardiff) - to be announced.
 2:00pm S Kurylev (Loughborough) - Rigidity of broken geodesics and
        inverse problems.
 3:00pm R Davies (Cardiff) - Inverse Problems in materials
        characterisation.
 4:00pm Tea.
 4:30pm S. Chandler-Wilde (Reading) - to be announced.
 5:30pm Close of meeting.

For further details contact the organiser Prof Malcolm Brown
Malcolm.Brown@cs.cardiff.ac.uk

From: "Prof. Fiorella Sgallari" <sgallari@dm.unibo.it>
Subject: Second Announcement SSVM 07, May 30-June 2, 2007, Ischia Italy.

Date: Mon, 25 Sep 2006

CALL FOR PAPERS AND PARTICIPATION: Second Announcement

First International Conference on Scale-Space and Variational Methods in
Computer Vision. Ischia, Italy, May 30- June 2, 2007

This international conference is a joint edition of the 6th Scale
Space and the 4th VLSM and it will be a first attempt to bring
together two different communities with joint research interests, the
one of scale space analysis and the one of variational, geometric and
level set methods and their applications in image interpretation and
understanding. Such a conference would serve several purposes:
international researchers and students would be exposed to
state-of-the-art research on mathematical, physical and computational
aspects of imaging, computer vision, graphics and inverse problems
with applications.

Paper submission is open at the link:
http://ssvm07.ciram.unibo.it/ssvm07_public/papersub.html

Conference deadlines:

Abstract submission: October 16th, 2006
Full paper submission: October 23rd, 2006
Notification of acceptance: January 15th, 2007
Final paper: February 15th, 2007

INVITED SPEAKERS
Prof. Franco Brezzi   University of Pavia, Italy
Prof. Emmanuel Candes   California Institute of Technology, USA
Prof. Tomaso A. Poggio   Massachusetts Institute of Technology, USA
                                (To be Confirmed)

GENERAL CO-CHAIRS and ORGANIZERS
Fiorella Sgallari   University of Bologna Italy
Almerico Murli   University of Naples Federico II, Italy
Nikos Paragios   Ecole Centrale de Paris, France

CONFERENCE CHAIRS
Alfred Bruckstein   Technion IIT, Israel
Bart ter Haar Romeny   Eindhoven University of Technology, NL
Guillermo Sapiro   University of Minnesota, USA
Joackim Weickert   Saarland University, Germany

For more details, see   http://ssvm07.ciram.unibo.it/ .

 Address: Prof. Fiorella SGALLARI
           Dept. of Mathematics   C.I.R.A.M. Research Center
                     Faculty of Engineering
           University of Bologna   University of Bologna
           Piazza di Porta San Donato 5   Via Saragozza 8
           40127 Bologna (ITALY)   40123 Bologna (ITALY)
 E-mail: SGALLARI@DM.UNIBO.IT   SGALLARI@CIRAM.ING.UNIBO.IT
 Tel.:   + 39 051 2094482   + 39 051 2093982
 Fax: + 39 051 2094490   + 39 051 582528
 Home page: http://www.ciram.unibo.it/~sgallari/

From: Sarp Adali <ADALI@ukzn.ac.za>

Subject: Int Conf on Composite Science and Technology
Date: Tue, 19 Sep 2006

Dear Colleague,

Attached is the Second Call-for-Papers announcement for

Sixth International Conference on Composite Science and Technology
22-24 January 2007
Durban, South Africa

Abstract deadline is 30 September 2006 and the deadline for the
submission of a paper to the special conference issue of Composite
Structures is 30 April 2007.

On behalf of the Organizing Committee
Sarp Adali

Dr Sarp Adali
Sugar Millers' Professor of Mechanical Design
Fellow of ASME
School of Mechanical Engineering
University of KwaZulu-Natal
Durban   4041
South Africa

Direct tel: + 27 31 260 3203
Secretary: + 27 31 260 3202
Fax: + 27 31 260 3217
e-mail: adali@ukzn.ac.za

From: Connie Young <Young@siam.org>
Subject: SIAM CSE07 Poster Submission Deadline Extended
Date: Wed, 20 Sep 2006

SIAM Conference on Computational Science & Engineering (CSE07)
February 19-23, 2007
Hilton Orange County/Costa Mesa, Costa Mesa, California

The poster submission deadline for CSE07 has been extended to
December 1, 2006!

Visit _http://www.siam.org/meetings/cse07/participation.php_ for
information on how to submit.

Contact the SIAM Conference Department at _meetings@siam.org_
<mailto:meetings@siam.org%20> with any questions.

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: Postdoc and PhD positions
Date: Fri, 22 Sep 2006

Helical cone beam x-ray tomography

I am looking for two postdoctoral mathematicians and two PhD students
to work on theoretical problems and reconstruction algorithms for
helical cone-beam x-ray tomography for airport baggage screening and

process tomography. Working in partnership with a company developing
x-ray tomography systems we aim to understand issues of uniqueness and
stability of solution, derive an optimal scanning strategy and develop
fast, accurate reconstruction methods that can be implemented in
advanced computational hardware.

Official job advertisements will follow shortly, in the meantime
please contact me informally.

Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.maths.manchester.ac.uk/~bl
bill.lionheart@manchester.ac.uk

From: "Jennifer Mueller" <jennifer.l.mueller@gmail.com>
Subject: Tenure-track faculty positions at Colorado State University
Date: Sun, 24 Sep 2006

The Department of Mathematics at Colorado State University invites
applications for two tenure-track faculty positions. One position is
at the rank of Assistant Professor while the second position is open
to candidates at the Assistant or Associate ranks. The successful
applicant must complement existing faculty research. The areas of
immediate interest are pure and applied analysis in any field,
optimization, differential geometry, and inverse problems. Exceptional
candidates in all areas of mathematics will, however, be considered
and are encouraged to apply.

Applicants should submit an AMS cover sheet, complete curriculum
vitae, summary of future research plans, evidence of effective
teaching, and at least three letters of recommendation using the
service provided by the AMS at *http://www.mathjobs.org*
<http://www.mathjobs.org/>.

Applications postmarked by November 27, 2006 are guaranteed full
consideration. Colorado State University is an EEO/AA employer (Equal
Opportunity Office, 101 Student Services).

Submitted by: Jennifer Mueller

From: Magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Mon, 11 Sep 2006

Mathematics of Control, Signals, and Systems   2006   Volume 18, No. 3
                       Table of Contents

On a generalization of the Youla-Kucera parametrizarion. Part II: The
lattice approach to MIMO systems   A. Quadrat

Stabilization by means of time-varying hybrid feedback
I. Karafyllis

On the controllability of anomalous diffusions generated by the
fractional Laplacian   L. Miller

The regular linear systems associated with the shift semigroups and
application to control linear systems with delay

S. Hadd, A. Idrissi and A. Rhandi

INFORMATION

The tables of contents of MCSS and the .pdf files of its papers are available from the publisher Springer at:

http://link.springer.de/link/service/journals/00498/index.htm

Information on MCSS is available also at the Editors' home pages:

www.cwi.nl/~schuppen/mcss/mcss.html
www.math.rutgers.edu/~sontag/mcss.html

Address for submissions by email or regular mail:

J.H. van Schuppen (Editor-in-Chief MCSS)
CWI
P.O.Box 94079
1090 GB Amsterdam
The Netherlands
Email mcss@cwi.nl

Eduardo Sontag and Jan van Schuppen (Editors)

From: Romas Baronas <romas.baronas@mif.vu.lt>
Subject: Table of Contents, Nonlinear Analysis: Modelling and Control
Date: Tue, 19 Sep 2006

Nonlinear Analysis: Modelling and Control 2006   Vol. 11, No. 3
                   Table of Contents

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

Nonlinear Analysis: Modelling and Control, an official journal of the Lithuanian Association of Nonlinear Analysts (LANA), welcomes contributions from the international community.

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

Dr. Romas Baronas, Journal Secretary,
Nonlinear Analysis: Modelling and Control
------- end -------ren, and Andy Wathen.

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

Today's Topics:

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.math.msu.edu/ipnet

From: Neil Wright <ntwright@egr.msu.edu>
Subject: IPS 2007
Date: Fri, 27 Oct 2006

CALL FOR PAPERS

2007 Inverse Problems Symposium
June 11 & 12, 2007
Michigan State University
East Lansing, Michigan, USA
www.inverseproblems2007.org

This is the 20th in the series of National and International Meetings
on Inverse Problems that were initiated at Michigan State University
in 1988. The new name reflects the breadth of research of the
attendees to these symposia. Papers are solicited from all areas
involving inverse methods and their applications. The symposium is
organized in a single session format to foster cross-disciplinary
interaction. Solicited topics include:

Mathematical and Statistical Aspects of Inverse Problems
  1. Theory and Methods of Inverse Problems
  2. Stability and Error Analysis

Design of Experiments
  1. Optimal Design of Experiments
  2. Analysis of Actual Experimental Data

Applications
  1. Heat Transfer, Applied Mechanics, Other Engineering Disciplines
  2. Biology, Biochemistry, Genetics, and Medicine
  3. Nondestructive Evaluation
  4. Tomography

5. Inverse Scattering
     6. Geology and Environmental Phenomena
     7. Economics

PAPER SUBMISSION:
Please submit a 100 word abstract in electronic form to the website by
December 8, 2006. An extended abstract will be due April 15, 2007. For
details on format, submission, and registration, please refer to the
conference web page www.inverseproblems2007.org
<http://www.inverseproblems2007.org/>

IMPORTANT DATES:
December 8, 2006   Submission of a 100-word abstract
February 15, 2007   Notification of acceptance to authors
April 15, 2007   Submission of 1 page extended abstract
May 1, 2007   Deadline for early registration

Submitted by: Neil Wright, Associate Professor of Mechanical
Engineering, Michigan State University

From: 5icip@cosmos.com.ru
Subject: 5ICIP
Date: Tue, 14 Nov 2006

CALL FOR PAPERS

Fifth International Conference

INVERSE PROBLEMS: IDENTIFICATION, DESIGN AND CONTROL

May 10 - May 16, 2007
Boat cruise Kazan Nijniy Novgorod - Moscow by Volga river, RUSSIA

Organized by:
Russian Scientific Society "Inverse Problems in Engineering"
Moscow State Aviation Institute (MAI)
Moscow State University (MGU)

Sponsoring Organizations:
Ministry of Education and Science of Russia
Russian Foundation of Basic Research

Objectives:
Following the successful first, second, third and forth conferences in
this series (held in Suzdal (1990), in St.Petersburg (1994), boat
cruise Moscow - St.Petersburg (1998) and boat cruise Moscow Kostroma -
Moscow (2003)) the objective of this Fifth International Conference is
to bring together the scientists and engineers involved in inverse
problems research and to provide a relaxed atmosphere for in-depth
discussion of the types of inverse problems which occur in engineering
practice.

The Identification, Design and Control problems dealing with unknown
boundary and initial conditions, sizes and shapes of domains, physical
properties of the media, governing systems of equations, and internal
and boundary sources in the multidisciplinary fields involving
thermodynamics, heat transfer, fluid mechanics, strength of materials,
structural dynamics, electro-magnetics, and nuclear systems are all of
interest and are welcome at this conference. Methods of interest

include also efficient and robust numerical techniques (including optimization) that are being applied to cope with a wide variety of identifications problems. The behavior of numerical algorithms for the solution of these extremely conditioned problems and their critical evaluation by comparison with experiments or established benchmarks are highly desired. The conference is of importance to all scientists and engineers who are actively involved in developing innovative theoretical approaches as well as in solving practical industrial problems. The International Scientific Advisory Committee members anticipate that the conference will point out new directions in the identification of mathematical models, design of technical systems and control of dynamic processes.

Conference Themes:
The topics listed below should give only a general guideline for possible contributions. Papers on other topics connected with other types of inverse problems will also be considered if they fall within the objectives of the conference.

Heat Conduction
Thermal Radiation
Diffusion-Convection
Thermal Processes in Porous Media
Thermal Processes in Composites
Phase Change Processes
Fire and Combustion
Thermal Stability
Vibrations and Structural Dynamics
Acoustics
Electromagnetics
Materials Processing
Elasticity, Thermoelasticity, and Elasto-Plasticity
Tomography and Inverse Scattering
Gas-Liquid Flows
Mechanics of Solids
Nuclear Transport
Optimal Experiments Design
Analysis of Experimental Data, Signal and Noise Processing.

International Scientific Advisory Committee:
O.M. Alifanov, (Conference Chairman), Moscow Aviation Institute, RUSSIA
E.A. Artioukhine, University of Franche-Comte, Belfort, FRANCE
J.V. Beck, Michigan State University, USA
G. Chavent, INRIA, FRANCE
A.M. Denisov, Moscow State University, RUSSIA
G.S. Dulikravich, University of Texas at Arlington, USA
A.F. Emery, University of Washington, USA
J.R. Howell, University of Texas at Austin, USA
D.B.Ingham, University of Leeds, UK
Y. Jarny, ISITEM, University of Nantes, FRANCE
S. Kubo, Osaka University, JAPAN
D.Lesnic, University of Leeds, UK
Y.M. Matseevity, Institute for Problems in Machinery, Kharkov, UKRAINE
M.P. Menguc, University of Kentucky, USA
V.V. Mikhailov, Moscow Aviation Institute, RUSSIA
D.A. Murio, University of Cincinnati, USA
A.V. Nenarokomov, Moscow Aviation Institute, RUSSIA
H. R.B.Orlande, Federal University of Rio de Janeiro, BRAZIL
N.V. Pavliukevich, Institute of Heat and Mass Transfer, Minsk, BELARUS
Y.V. Polezhaev, Institute of High Temperature RAN, Moscow, RUSSIA

H.-J. Reinhardt, University of Siegen, GERMANY
S.V. Reznik, Bauman Moscow State Technical University, RUSSIA
A.J. da Silva Neto, Federal University of Rio de Janeiro, BRAZIL
M. Tanaka, Shinshu University, JAPAN
P.N. Vabishchevich, Institute of Mathematical Modeling RAN, Moscow,
RUSSIA
K.A. Woodbury, University of Alabama, USA
A.G.Yagola, Moscow State University, RUSSIA

Executive Committee:
Aleksey V. Nenarokomov (Chair of the Executive Committee)
Moscow Aviation Institute
Departmentof Space System Engineering
4, Volokolamskoe Shosse
Moscow 125993, RUSSIA
Telephone: 7(495) 158 47 90   Fax: 7(495) 158 29 77
e-mail: aleksey.nenar@cosmos.com.ru
Valeriy V. Michailov, Moscow Aviation Institute
Dmitrty M. Titov, Moscow Aviation Institute
Vladimir V. Hohulin, Moscow Aviation Institute

Conference Secretariat:
Mr. Andrey V.Netelev
Ms. Evgenia.V. Filatova

Moscow Aviation Institute
4, Volokolamskoe Shosse
Moscow 125993, RUSSIA
Telephone: 7(095) 158 58 65   Fax: 7(495) 158 00 23
E-mail: 5invp@cosmos.com.ru

Mini-Exhibition:
There will be a small table-top exhibition of publications, hardware
and software relevant to the conference themes. For more information
please express your interest on the attached inquiry form.

Short Course:
Short Course on Inverse Problems in Engineering and Natural Sciences
is planned during the Conference (every evening two keynote
lectures). The Short Course will be sponsored by the Ministry of
Education and Science of Russia and it is free of charge for students
and young scientists.

Time Schedule:
As soon as possible - Return the reply form by FAX or E-mail.
December 15, 2006 -   Submit abstracts (300 words) to the Secretariat.
January 25, 2007 -   Preliminary acceptance notification to authors.
February 25, 2007 -   Submit .pdf file of the paper to the Secretariat.
April 1, 2007 - Final acceptance notification to authors.
April 15, 2007 - Submit final camera-ready version of the full
                       paper for the book of proceedings.

Abstracts, papers and presentations should be in English. Authors of
the accepted manuscripts are invited to submit their final papers for
review and possible publication in the international journal on
Inverse Problems in Engineering (IPE).

Registration Fees:
(Includes Conference proceedings, other documentation, refreshments
and conference dinner)

Authors, Session Chairmen, Members of the Scientific Advisory Committee:
$250
All other participants: $300
Students (a letter from a faculty member certifying student status is required): $50
Guests: $40

Accommodation, Tours and Social Events:
The riverboat cruise Kazan Nijniy Novgorod - Moscow by Volga river is one of the most popular summer vacation tours in Russia, and is well-known in Europe and USA. It offers outstanding atmosphere for both relaxation and excitement. "Borodino" is a two-deck riverboat for 85 passengers with two restaurants, a sauna, a bar, two conference rooms, etc. Several historical sites are located close by the river and will be visited, including, Kasan (the capital of former Kazanskoe Hanstvo, which widely celebrated its one thousand anniversary last year), Nijniy Novgorod (the third city of Russia). Kostroma (the original place of Romanov's dynasty). Also, pre-conference tour and post-conference tour in Moscow can be arranged for interested parties. All reservations for the riverboat will be made through the Conference Secretariat.

The riverboat room charges, including bed, breakfast, lunch and dinner, for six days trip and tours of Kazan, Bulgar, Nijniy Novgorod, Kostroma, transfer Moscow-Kazan, will total approximately: * Class A cabin (a double cabin includes two beds, table, chairs, closet, shower, toilet) $900 - per person (accommodating two passengers). There will be a 65% discount for children as a third passenger in class A cabins (there are additional beds in some cabins). * Studio cabin (includes two beds, two sofas, table, chairs in the 16 sq.m. first room; in the second room there is a closet, shower, toilet) $220 - per four persons.

Inquiry Form

INVERSE PROBLEMS: IDENTIFICATION, DESIGN AND CONTROL

May 10- 16, 2007, Moscow, Russia
Title..... Initials........Family name:...........................
Affiliation:...
Address:..
Tel.:..
Fax:..
E-mail:..

Please replace # symbol with > symbol for each of the desired items listed below:
 # I intend to participate in the Conference
 # I intend to submit a paper to the Conference
 # An abstract (300 words) is attached
 # I am interested in the mini-exhibition facilities
 # I am interested in the Short Course
 # I am interested in the pre-conference Moscow tour
 # I am interested in the post-conference Moscow tour.

I suggest that this announcement may also be sent to:
Title and name_____
Address_____

Please return the completed Inquiry Form by E-mail to:
Conference Secretariat
Moscow Aviation Institute
Dept. of Space System Engineering
4, Volokolamskoe Sh.,,
Moscow, 125993, RUSSIA
Telephone: 7(095) 158-58-65   Fax: 7(095) 158-29-77
E-mail:5invp@cosmos.com.ru

From: Helcio Rangel Barreto Orlande <helcio@mecanica.coppe.ufrj.br>
Subject: IPDO 2007 - EXTENDED DEADLINE
Date: Tue, 14 Nov 2006

EXTENDED DEADLINE FOR ABSTRACTS

International Symposium on
INVERSE PROBLEMS, DESIGN AND OPTIMIZATION (IPDO-2007)
Miami Beach, Florida, U.S.A., April 16-18, 2007.
http://ipdo.freeshell.org/ipdo2007/index.htm

IPDO Symposium's main objectives are to bring the three communities of
researchers (inverse problems experts, design theory experts, and
optimization experts) together and provide a common forum for
presenting different applications, problems, and solution strategy
concepts. These three areas of research to be covered by the IPDO
Symposium have a number of things in common. For example, many
methodologies for solving inverse problems employ optimization
algorithms. But, there are no optimization algorithms that employ
methods of inverse design that could potentially substantially reduce
the number of time-consuming analysis required by the typical
evolutionary optimization algorithms. Similarly, design theory is not
well known in the optimization community where formulation of the
appropriate multiple objectives and system-of-systems design
formulations are often performed using intuition and personal
experience. The IPDO Symposium thus offers a unique international
forum that is expected to provide an excellent basis for
cross-fertilization of ideas and creation of new synergistic
approaches and methodologies that will combine the three fields of
research so that more general, robust, accurate and computationally
economical design methods are created for multi-disciplinary
applications.

Organizers:
G.S. Dulikravich (chair), H.R.B. Orlande (co-chair), M. Tanaka
(co-chair), M.J. Colaco (secretary)
Sponsors:
AFOSR (United States Air Force Office of Scientific Research)
ARO (United States Army Research Office)
T&F (Taylor & Francis Publishers)
FIU (Florida International University)
UFRJ (Federal University of Rio de Janeiro)

Areas of interest:
The IPDO-2007 Symposium will emphasize a broad range of deterministic,
statistical, analytical, computational and experimental approaches,
which can be applied to the solution of inverse, design and
multi-disciplinary optimization problems. Contributions dealing with
theoretical concepts and practical applications are encouraged, such
as in petrochemistry, aeronautics, astronautics, bio-medicine,

transport and sensing of pollutants, materials design and processing, remote sensing, non-destructive evaluation, material property determination, acceleration of large scale optimization, design theory, etc.

Deadlines:
20 November, 2006deadline for submission of two-page abstracts
                     in .pdf format
1 December, 2006 informing authors about acceptability of
                     abstracts
31 January, 2007 deadline for submission of full eight-page
                     papers
15 February, 2007deadline for early registration

Abstracts and papers:
Please submit two-page abstracts (including preliminary results, basic figures, formulas, and references) in .pdf format to the following e-mail addresses: IPDO2007@GMAIL.COM, IPDO2007@YAHOO.COM

All accepted abstracts will be in a Book of Abstracts provided to all participants during IPDO-2007. Final papers passing a three-person review process will be provided electronically to all those that register by April 1, 2007. Selected papers will be published in Inverse Problems in Science and Engineering journal. IPDO-2007 Web Page with information about registration, hotel, visa, etc.: http://ipdo.freeshell.org/ipdo2007/index.htm For information contact: Prof. George S. Dulikravich; tel. +1 (305) 348- 7016; E-mail: dulikrav@fiu.edu

Helcio R. B. Orlande
Department of Mechanical Engineering, POLI/COPPE
Federal University of Rio de Janeiro, UFRJ
Cid. Universitaria, Cx. Postal: 68503
Rio de Janeiro, RJ, 21941-972
Brazil
Phone:55-21-2562-8368
Fax: 55-21-2562-8383
e-mail: helcio@mecanica.coppe.ufrj.br

Please visit the following web-sites:
IPDO-2007: http://ipdo.freeshell.org/ipdo2007
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING:
http://www.tandf.co.uk/journals/titles/17415977.asp
HEAT TRANSFER ENGINEERING:
http://www.tandf.co.

From: Kirsten Wilden <Wilden@siam.org>
Subject: Upcoming Call for Papers Deadline - CT07
Date: Tue, 14 Nov 2006

Subject: SIAM Conference on Control and Its Applications (CT07) - Upcoming CFP Deadlines

Conference Name: SIAM Conference on Control and Its Applications

Location: San Francisco, California

Dates: June 29 - July 1, 2007

Invited Plenary Speakers:
Andrzej Banaszuk, United Technologies Research Center
Frank Doyle, University of California, Santa Barbara
Naira Hovakimyan, Virginia Polytechnic Institute and State University
Wei Kang, Naval Postgraduate School
Navin Khaneja, Harvard University
Jacquelien Scherpen, Delft University of Technology, Netherlands
Anders Rantzer, Lund University, Sweden

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/ct07/

Upcoming Deadlines:

Minisymposium proposals: November 28, 2006

Abstracts for all contributed and minisymposium presentations: December 28, 2006

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

From: Kirsten Wilden <Wilden@siam.org>
Subject: ACM-SIAM Symposium on Discrete Algorithms - Registration/Program
Date: Fri, 6 Oct 2006

Conference Name: ACM-SIAM Symposium on Discrete Algorithms (SODA07)
Conference Program Chair: Hal Gabow, University of Colorado, Boulder
Location: Astor Crowne Plaza Hotel, New Orleans, Louisiana
Dates: January 7-9, 2007

Registration is Now Available!

Pre-Registration Deadline: December 4, 2006
Hotel Reservation Deadline: December 4, 2006

Registration and the preliminary program for this conference are available at: http://www.siam.org/meetings/da07/

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

From: Klibanov, Michael <mklibanv@email.uncc.edu>
Subject: Assistant Professor Position
Date: Sun, 1 Oct 2006

Tenure track position at the Assistant Professor level in Analysis beginning in August 2007. Candidates must have a Ph.D., demonstrated strength at research, and a commitment to teaching. Preference will be given to applicants with strong potential for interdisciplinary research and external funding.

Send letter of interest, curriculum vitae, statement of research and teaching interests and arrange to have 3 letters of reference sent to Analysis Search Committee, Department of Mathematics and Statistics, University of North Carolina at Charlotte, Charlotte, NC 28223. Review of applications will begin on January 18, 2007. Contact Dr. Alan Dow at adow@uncc.edu for more information.

UNC Charlotte strives to create an academic climate in which the
dignity of all individuals is respected and maintained. Therefore, we
celebrate diversity that includes, but is not limited to
ability/disability, age, culture, ethnicity, gender, language, race,
religion, sexual orientation, and socio-economic status. AA/EOE.

From: Daniela Calvetti <daniela.calvetti@case.edu>
Subject: Faculty positions in Computational Mathematics at CWRU
Date: Tue, 07 Nov 2006

The Department of Mathematics at Case Western Reserve University
(10900 Euclid Avenue, Cleveland, OH 44106) invites applications for
tenure-track and temporary positions.

One or more tenure-track or tenured positions in computational
mathematics, effective 2007--2008. Applicants must have a research
program in computational mathematics and hold a PhD or equivalent
degree in mathematics, computer science, or a closely related field.
Candidates whose primary research interest is in scientific computing/
numerical analysis will be considered, with a preference for
individuals whose application areas are well suited for
interdisciplinary collaboration in life and physical sciences and
engineering. Preference is given to junior applicants, but strong
candidates will be also considered for more senior positions.

Applicants should show promise of a strong research program, and a
demonstrated record of research accomplishments is needed for
candidate considered for hiring at a senior level. All candidates
should have strong records, or promise, in undergraduate and graduate
teaching and mentoring.

Also, contingent on funding and staffing needs, the Department
anticipates filling one or more visiting and lecturer positions for
2007ï¿½2008. Desired: PhD in mathematics, masters degree acceptable.
Case is an integral part of one of the major research medical
complexes in the country. It also has a major presence in various
science and engineering disciplines. Geographically, it is located on
the eastern edge of Cleveland, in northeast Ohio, adjacent to
University Circle, home to the Cleveland Symphony Orchestra, the
Cleveland Museum of Art, and many other cultural institutions. There
is a wide variety of housing, schooling, and other amenities
nearby. The Department has approximately 15 faculty, with several
focused research areas. The Department is responsible for service
(beginning with calculus), majors, and graduate instruction. Nominal
teaching load is 2/2. Case is a recipient of a National Science
Foundation ADVANCE institutional transformation grant to increase the
participation of women in science and engineering.

Submit: letter of application (including e-mail and fax), AMS cover
sheet, vitae, and have three letters of evaluation sent. Submit
preferentially electronically to math-faculty-position@cwru.edu.
Applications will be considered on receipt; applications will be
accepted until positions are filled. CWRU is an Equal
Opportunity/Affirmative Action Employer. Women and minorities are
especially encouraged to apply.

From: Marek Behr <behr@cats.rwth-aachen.de>

Subject: Junior Research Group Leader position, RWTH Aachen University
Date: Sun, 12 Nov 2006

Junior Research Group Leader position at the RWTH Aachen University

Aachen Institute for Advanced Study in Computational
Engineering Science (AICES)

The AICES graduate school at the RWTH Aachen University was
established under the Excellence Initiative of the German federal and
state governments to promote novel research and training in the field
of computational engineering science. The school is a collaboration
of 14 university institutes, the Research Centre Juelich, and the Max
Planck Institute for Metal Research. AICES organizes the doctoral
education of ca. 100 students, as well as ca. 10 independent junior
research groups.

Two positions of Junior Research Group leaders are available starting
November 1, 2006. One additional position is expected in 2008. These
positions are limited to 5 years, and paid according to the German
civil service BAT I scale (or TVoD equivalent) including standard
benefits. Successful group leaders will be considered for a tenured W2
position at the host university in an open search at the end of their
term. Ideal candidates have between 2 and 4 years of postdoctoral
research experience including substantial experience outside Germany,
and specialize in one of the AICES focus areas:

http://www.aices.rwth-aachen.de/academic-aims

Application materials (personal statement, CV, list of publications, 3
references with contact information, funding history, any additional
information) should be sent to:

Junior Research Group Leader Search 2006
AICES
RWTH Aachen University
Templergraben 55
52056 Aachen
Germany
search-jrg-2006@aices.rwth-aachen.de

Electronic applications are encouraged. Applications will be
considered starting November 1, 2006 until the positions are
filled. For further information, contact Prof. M. Behr,
behr@cats.rwth-aachen.de, Tel. +49 241 80 28430. For updates on this
search, see http://www.aices.rwth-aachen.de/jobs.

Submitted by:
Prof. Marek Behr, Ph.D.
Chair for Computational Analysis of Technical Systems (CATS)
Center for Computational Engineering Science (CCES)
RWTH Aachen University, 52056 Aachen, Germany
+49 (0)241 80 28430 -fax- +49 (0)241 80 22430
behr@cats.rwth-aachen.de http://www.cats.rwth-aachen.de

From: Manuchehr Soleimani <M.Soleimani-2@manchester.ac.uk>
Subject: Special Issue in Computational Aspects of Soft Field Tomography
Date: Fri, 20 Oct 2006

It is pleasure to present the special issue in "computational aspect of soft field tomography", in "International Journal of Information & Systems Sciences"   (http://www.math.ualberta.ca/ijiss/).
The papers are available volume 4, no.2:

 http://www.math.ualberta.ca/ijiss/SS-volume-2-06.htm

                       Table of Contents

Special Issue on Computational Aspect of Soft Field Tomography

```
Tel : (+44)(161-3065695)
Fax : (+44)(161-3065748)


----------------------------
From:      Magrijn <magrijn.secsup@tip.nl>
Subject: Table of Contents: Mathematics of Control, Signals, and Systems
Date:      Tue, 7 Nov 2006

Mathematics of Control, Signals, and Systems  2006  Vol. 18, No. 4
                     Table of Contents


Stability of leaderless discrete-time multi-agent systems
D. Angeli and P.-A. Bliman

Some properties of infinite-dimensional systems capable of
asympotically tracking bounded uniformly continuous signals
E. Immonen

Energy funtions and dissipativity-based balancing of discrete-time
nonlinear systems     R. Lopezlena, J.M.A. Scherpen,


A performance comparison of robust adaptive controllers: linear
systems.      A. Sanei, M. French,


INFORMATION

The tables of contents of MCSS and the .pdf files
of its papers are available from the publisher Springer at:
http://link.springer.de/link/service/journals/00498/index.htm


Information on MCSS is available also at the Editors' home pages:

www.cwi.nl/~schuppen/mcss/mcss.html
www.math.rutgers.edu/~sontag/mcss.html

Address for submissions by email or regular mail:

J.H. van Schuppen (Editor-in-Chief MCSS)
CWI
P.O.Box 94079
1090 GB Amsterdam
The Netherlands
Email mcss@cwi.nl


Eduardo Sontag and Jan van Schuppen (Editors)

Submitted by: Corry Magrijn (Secretary) for Jan H. van Schuppen
(Editor-in-Chief MCSS)

----------------------------
From:      Romas Baronas <romas.baronas@mif.vu.lt>
Subject: Table of Contents, Nonlinear Analysis: Modelling and Control
Date:      Tue, 07 Nov 2006

Nonlinear Analysis: Modelling and Control  2006  Vol. 11, No. 4
                     Table of Contents
```

Nonlinear Analysis: Modelling and Control, an official journal of
the Lithuanian Association of Nonlinear Analysts (LANA),
welcomes contributions from the international community.

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

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

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

From: Chandler, Katie <Katie.Chandler@tandf.co.uk>
Subject: Table of Contents: Linear and Multilinear Algebra
Date: Tue, 7 Nov 2006

Linear and Multilinear Algebra   December 2006   Vol. 54, No. 6
                    Table of Contents

Rod Gow, Rachel Quinlan

When is a linear combination of two idempotent matrices the group
involutory matrix?   Jerzy K. Baksalary, Oskar Maria Baksalary

On quasi-strongly regular graphs   Felix Goldberg

On nonsingular trees and a reciprocal eigenvalue property
S. Barik, M. Neumann, S. Pati

------- end -------

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

Today's Topics:
     2007 Inverse Problems Symposium Update
     Int'l Conf on Inverse and Ill-Posed Problems in Math Physics
     Special Session on Inverse Problems, CMM2007, Lodz, Poland
     Call for papers, OSA Conference on Signal Synthesis and Recovery
     Request for help on an inverse problem
     New book information: Nonsmooth Mechanics of Solids
     CSE Student Paper Prize at SIAM CSE Conference
     Call for Papers: SISC Special Issue on CS&E
     Table of Contents: Inverse Problems
     Table of Contents: Linear Algebra and Its Applications

Submissions for IPNet Digest:
        Mail to ipnet-digest@math.msu.edu

Information about IPNet:
        http://www.math.msu.edu/ipnet

From: Neil Wright <ntwright@msu.edu>
Subject: 2007 Inverse Problems Symposium updates
Date: Fri, 8 Dec 2006

2007 Inverse Problems Symposium

June 11 & 12, 2007

Michigan State University

East Lansing, Michigan, USA

DEADLINE EXTENDED
Due to multiple requests, the deadline for submission of the initial
abstract has been extended to 8 JANUARY 2007.

ADDED TO THE SCHEDULE: On the afternoon of Sunday, June 10th,
Prof. Erik Goodman of MSU (http://www.egr.msu.edu/~goodman/
<http://www.egr.msu.edu/%7Egoodman/>) will present a 2 hr seminar on
the topic of Genetic Algorithms with application to Inverse
Problems. This seminar is open to Symposium participants.

This symposium is the 20th in the series of National and International
Meetings on Inverse Problems that were initiated at Michigan State
University in 1988. Papers are solicited from all areas involving
inverse methods and their applications. Abstracts may be submitted at
the symposium website *www.inverseproblems2007.org*
<http://www.inverseproblems2007.org>

Honorary Chairperson: James V. Beck, Professor Emeritus, Michigan
State University

For more information, please contact:
Conference Chairperson:
Neil Wright, Michigan State University, East Lansing, MI, 48864

phone: (517) 432-4917
email: ntwright@msu.edu <mailto:ntwright@msu.edu>

From: Andrey L. Karchevsky <karchevs@math.nsc.ru>
Subject: Int'l Conf on Inverse and Ill-Posed Problems
Date: Fri, 24 Nov 2006

First announcement

International Conference <Inverse and Ill-Posed Problems of
Mathematical Physics>, dedicated to Professor M.M. Lavrent'ev in
occasion of his 75-th birthday, August 20-25, 2007, Novosibirsk,
Russia

The conference aim is to acquaint the scientific community with the
last achievements in the theory and practice of ill-posed and inverse
problems.

Conference is organized by
Sobolev Institute of Mathematics of SB RAS,
Institute of Computational Mathematics and Mathematical Geophysics of SB
RAS,
Trofimuk Institute of Oil and Gas Geology and Geophysics of SB RAS,
Novosibirsk State University,
Krasnoyarsk State University,
Ugra Research Institute of Information Technologies.

Chairman - corresponding member of RAS, Prof. V.G. Romanov
Vice-Chaiman - Prof. M.M. Lavrentiev (jr.)
Vice-Chaiman - Prof.. A.L. Karchevsky
Secretary - Dr. I.A. Gajnova
(E-mail: lavr75@math.nsc.ru, tel. +7-383-333-33-87)

Conference sections:
Section 1. Theory of inverse problems.
Section 2. Theory of ill-posed problems.
Section 3. Numerical methods of solving of ill-posed and inverse
problems.
Section 4. Applications of ill-posed and inverse problems.

Conference languages: Russian and English

Abstracts: The abstracts must be submitted in the form of pdf- or
doc-files till April 30, 2007. If organizing committee accepts the
abstract then it will be available on Internet page of
Conference. After the end of Conference on the Conference Internet
page the organizing committee can conserve only the abstracts of
participants who taken part in Conference.

Conference location and Travel Arrangements: Conference will take
place in Academgorodok (academic campus) near Novosibirsk, the largest
city of Siberia. Academgorodok is situated in the middle of Siberian
forests not far from Ob Sea. It is about 40 km from Novosibirsk and
from the international airport Tolmachovo. There are about 40 research
institutes and Novosibirsk State University in
Academgorodok. Participants will be accommodated in a hotel within
walking distance from the Conference location.

Climate: Conference will take place during the end of summer season

when the average temperature is 20 C (82 F) during the day and down to
15 C (59 F) at night.

Address:
Sobolev Institute of Mathematics of SB RAS,
Ak. Koptyug prosp., 4,
630090 Novosibirsk, Russia.
Tel.: (383) 333 29 87
Fax: (383) 333 25 98
E-mail: lavr75@math.nsc.ru

From: Giulio Maier <mailto:giulio.maier@polimi.it>
Subject: CMM2007, Special Session on Inverse Problems, Lodz, Poland
Date: Saturday, November 18, 2006

Dear Colleague,

In view of your well known expertise in this scientific field with
growing importance in mechanics, you are cordially invited to
contribute to the Special Session on Inverse Problems that we are
organizing in the forthcoming 17th International Conference on
Computer Methods in Mechanics to take place in Lodz-Spala, Poland,
June 19-22, 2007 (see website: cmm.p.lodz.pl).

The purpose of this Special Session is to gather contributions dealing
with computational methods, theoretical concepts and practical
applications in the area of inverse analysis.

Particularly desirable are contributions to the following timely
issues: material characterization and design by inverse analysis in
various technologies, including micro and nano technologies;
diagnostic analyses of structures on the basis of laboratory or in
situ experiments, computer simulation of the tests and parameter
identification by minimizing the discrepancy through algorithms of
mathematical programming and/or soft computing.

Please, submit your abstract before December 15, 2006, according to
the guidelines specified below and, please, do not forget to refer to
this Special Session.

Looking forward to seeing you at the CMM 2007 next June,
kind regards

Giulio Maier
Department of Stuctural Engineering
Technical University (Politecnico) of Milan
P. Leonardo 32, 20133 Milano (Italy)
Tel: +39:02.2399.4221
Fax +39. 02.2399.4220
e.mail: giulio.maier@polimi.it <mailto:giulio.maier@polimi.it>

Antonino Morassi
Department of Georesources and Territory
University of Udine
Via Cotonificio 114, 33100 Udine (Italy)
Tel: +39 432 558739
Fax: +39 432 558700
e-mail: antonino.morassi@uniud.it <mailto:antonino.morassi@uniud.it>

Guidelines for abstracts

Two-page abstracts should be submitted by e-mail (cmm2007.p.lodz.pl)
or by post to the conference address. The abstracts should state
concisely the purposes, methods, results and conclusions of the work
with supporting figures and references as appropriate.

All the summaries must include authors names, affiliations, addresses,
telephone and fax numbers, and e-mail addresses of all
authors. Keywords (five maximum) are required.

Addresses of Conference office

CMM-2007
Faculty of Civil, Architecture and Environmental Engineering
Technical University of Lodz
Al. Politechniki 6
90-924 Lodz, Poland
phone, fax: +48-42-6313551
e-mail: cmm2007@p.lodz.pl <mailto:cmm2007@p.lodz.pl>
web site : http://www.cmm2007.p.lodz.pl/

From: Matson Charles L Civ AFRL/DESA
<charles.matson@kirtland.af.mil>
Subject: Call for papers, OSA Conference on Signal Synthesis and Recovery
Date: Tue, 14 Nov 2006 18:26:15 -0700

Signal recovery and synthesis is concerned with methods for obtaining
the best estimate of an image from the data and constraints at
hand. The topical area is important to many fields of optics, as well
as a broader constituency due to its interdisciplinary nature;
examples include digital image reconstruction from Fourier intensity
measurements, superresolution, tomographic reconstruction and blind
deconvolution. This topical meeting is concerned with theory,
algorithms and applications of signal recovery and synthesis in optics
and other disciplines.

URL: http://www.osa.org/meetings/topicalmeetings/srs/default.aspx

----
From: Paulo Maldini <maldini.paulo@gmail.com>
Subject: Request for help on an inverse problem
Date: Fri, 8 Dec 2006

Dear IPNetners!

i want to solve min||Ax-b||2 ,where A has dimension of 500*300,and has
a rank of 50. b and x is vector,and x is the variable i want to solve.

And x has its low and upper limit ,such as 0=<x<=1000. can some
subroutine solve these? Can you recommend it to me?

thank you and best regards!

Paulo Maldini
maldini.paulo@gmail.com
2006-11-24

From: Georgios Stavroulakis <gestavr@dpem.tuc.gr>
Subject: New book information: Nonsmooth mechanics of solids
Date: Tue, 28 Nov 2006

New Book Information

NONSMOOTH MECHANICS OF SOLIDS

CISM Lecture Notes Volume 485

Edited by Jaroslav Haslinger, Charles University, Prague, Czech Republic
and Georgios E. Stavroulakis, Technical University of Crete, Chania,
Greece and Technical University Braunschweig, Germany

CONTENTS

Preface

Collisions. Thermal effects. Collisions of deformable solids and
collisions of solids and fluids   M. Fre'mond

An introduction to impacts   Ch. Glocker

Approximation of variational and hemivariational inequalities of
elliptic type. Applications to contact problems with friction
J. Haslinger

Semicoercive hemivaritional inequalities, regularization methods,
applications on mechanics   Z. Naniewicz

Mathematical programs with equilibrium constraints. Theory and
numerical methods   J. Outrata

Applied nonsmooth mechanics of deformable bodies   G.E. Stavroulakis

Springer Wien New York, 2006, ISBN 3-211-48241-5

Submitted by: Georgios E. Stavroulakis
Professor, Technical University of Crete, Greece
http://users.isc.tuc.gr/~gestavroulakis

From: Ulrich RãƒÂ¼de <Ulrich.Ruede@informatik.uni-erlangen.de>
Subject: CSE Student Paper Prize @ SIAM CSE Conference
Date: Fri, 01 Dec 2006

Dear colleagues,

Let us direct your attention to the

    CS&E Student Paper Prize

to be awarded at the 2007 SIAM CS&E Conference February 19-23, in Costa
Mesa, California (http://www.siam.org/meetings/cse07/).

Founder of the prize is the Bavarian Graduate School of Computational
Engineering (BGCE, http://www.bgce.de/), a consortium offering an
honors track to the best students of three international master's
programs in Computational Engineering at Technische Universitaet
Muenchen (TUM) and Universitaet Erlangen-Nuernberg (FAU). The prize

will be awarded for outstanding student work in the field of CS&E, and the winner will be invited to spend one week (air fare and lodging expenses covered) in Bavaria, visiting FAU and TUM (one of the three German universities having recently succeeded in the federal excellence initiative) and getting in contact with BGCE's educational and research program, one of the most advanced ones in Europe. The main objective is to promote excellent students in CS&E and to foster international exchange at an early career stage.

Eligible for the prize will be undergraduate students as well as graduates prior to receiving their PhD (at date of submission). Candidates are required to summarize their work in a short paper of at most 4 pages and to present their work at SIAM CSE 2007 with a talk to be given in the special "CSE Student Prize Minisymposium". Excluded from the competition are only students from our own universities, FAU and TUM.

Deadline for application is December 31, 2006. Submissions should be sent in pdf format by e-mail to
    bungartz@in.tum.de
or
    ruede@cs.fau.de

Since we are interested in a broad and high-level competition, we ask you to encourage suitable candidates in your group or department to submit a paper and to support their participation in SIAM CSE 2007.

Your support is appreciated!

With our best regards,

Ulrich Ruede
Hans-Joachim Bungartz

Prof. Dr. Ulrich Ruede, Lehrstuhl fuer Simulation
Universitaet Erlangen-Nuernberg, Cauerstr. 6
D-91058 Erlangen, Germany
e-mail: ruede@informatik.uni-erlangen.de
Tel: +49 9131 85 28924, Fax: +49 9131 85 28928
URL: http://www10.informatik.uni-erlangen.de/~ruede
Editor-in-Chief, SISC, www.siam.org/journals/sisc.php

From: Ulrich RÃƒÂ¼de <Ulrich.Ruede@informatik.uni-erlangen.de>
Subject: Call for Papers: SISC Special Issue on CS&E
Date: Mon, 20 Nov 2006

SIAM J. Scientific Computing

Special Issue on Computational Science & Engineering

    http://www10.informatik.uni-erlangen.de/~ruede/SISC-CSE.html

Guest Editors-in-Chief:
    Chris Johnson, University of Utah
    David Keyes, Columbia University
    Ulrich Ruede, Universitaet Erlangen-Nuernberg

Call for papers:
Computational Science and Engineering (CS&E) is a rapidly growing

multidisciplinary field that employs advanced computation to understand and solve complex problems. Recognizing the growing importance of and interest in CS&E, the SIAM Journal on Scientific Computing (SISC) will devote a special issue to innovative research papers in CS&E. The guest editors are seeking papers that tackle problems from the real world and make a research contribution in one or more of the techniques of CS&E. Papers should illustrate new and useful techniques and tools for solving realistic problems, which often have complicated three-dimensional geometries, multiple scales, heterogeneities, anisotropies, and multi-physical or biological descriptions. Though such problem domains often thwart proofs of accuracy or efficiency, papers should address validation and verification through reduction to analyzable cases and convergence studies, as applicable, and comparisons with alternative approaches.

Deadlines:
The deadline for submission of papers is April 30, 2007, following the SIAM Conference on CS&E: http://www.siam.org/meetings/cse07/

Review Process:
Papers will be subject to review according to SISC standards by a guest Editorial Board.

Submission:
All interested should submit a manuscript and cover letter via SISC's online submission site.

Guest Editorial Board
    Gyan Bhanot, IBM
    Rupak Biswas, NADAS Ames Research Center
    Edmond Chow, D.E. Shaw Research
    Phil Colella, Lawrence Berkeley National Laboratory
    Yuefan Deng, Stony Brook University
    Lori Freitag Diachin, Lawrence Livermore National Laboratory
    Omar Ghattas, The University of Texas at Austin
    Laurence Halpern, Univ. Paris XIII
    Robert Harrison, Oak Ridge National Laboratory
    Bruce Hendrickson, Sandia National Laboratories
    Kirk Jordan, IBM
    Tammy Kolda, Sandia National Laboratories
    Louis Komzsik, UGS Corp.
    Ulrich Langer, Johann Radon Institute, Linz
    Hans Petter Langtangen, Simula Research Laboratory
    Steven Lee, Lawrence Livermore National Laboratory
    Kengo Nakajima, University of Tokyo
    Aiichiro Nakano, University of Southern California
    David P. Young, Boeing
    Stefan Turek, University of Dortmund
    Andy Wathen, Oxford University
    Margaret Wright, New York University

Additional Information:
    http://www10.informatik.uni-erlangen.de/~ruede/SISC-CSE.html

Ulrich Ruede

Prof. Dr. Ulrich Ruede, Lehrstuhl fuer Simulation
Universitaet Erlangen-Nuernberg, Cauerstr. 6
D-91058 Erlangen, Germany
e-mail: ruede@informatik.uni-erlangen.de

Tel: +49 9131 85 28924, Fax: +49 9131 85 28928
URL: http://www10.informatik.uni-erlangen.de/~ruede
Editor-in-Chief, SISC, www.siam.org/journals/sisc.php

Inverse Problems   December 2006   Volume 22, Issue 6
                     Table of Contents

Reconstruction of subdomain boundaries of piecewise constant
coefficients of the radiative transfer equation from optical
tomography data
S R Arridge, O Dorn, J P Kaipio, V Kolehmainen, M Schweiger,
T Tarvainen, M Vauhkonen and A Zacharopoulos

Inverse scattering transform for the Camassa--Holm equation
A Constantin, V S Gerdjikov and R I Ivanov

A linear model for chirp-pulse microwave computerized tomography:
applicability conditions
A M Massone, M Miyakawa, M Piana, F Conte and M Bertero

The inverse problem of recovering the Volterra convolution operator
from the incomplete spectrum of its rank-one perturbation
S A Buterin

The linear sampling method without sampling
R Aramini, M Brignone and M Piana

Construction of 3D potentials from a preassigned two-parametric family
of orbits   M-C Anisiu and T A Kotoulas

Interpolation in variable Hilbert scales with application to inverse
problems   P Math\'e and U Tautenhahn

Complex spherical waves and inverse problems in unbounded domains
M Salo and J-N Wang

Natural linearization for the identification of a diffusion
coefficient in a quasi-linear parabolic system from short-time
observations   H Cao and S V Pereverzev

An inverse scattering problem for a partially coated buried obstacle
M Di Cristo and J Sun

All articles are free for 30 days after publication on the web. This
issue is available at: http://stacks.iop.org/IP/22/i=6

                     Table of Contents

A note on the computation of the CP-rank
Abraham Berman and Uriel G. Rothblum

Perturbation analysis of generalized saddle point systems
Hua Xiang, Yimin Wei and Huaian Diao

Table of Contents