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IPNet Digest   Volume 14, Number 01   Jan 09, 2007

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

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      5th Int'l Conf. on Inverse Problems: Extended Deadline
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      PhD, Post-doctoral Positions: Reconstruction of X-Ray Data
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      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: AIP 2007
Date: Mon, 18 Dec 2006

We anticipate National Science Foundation (NSF) support to participate
in AIP 2007 for junior scientists (at most six years past the PhD)
affiliated with US Universities or Institutes, and scientists
affiliated with US Universities and Institutes that don't have grant
support or don't have travel support in their grants. The deadline for
applications is February 28, 2007.

The junior participants are asked to send a CV and an email letter of
application to Gunther Uhlmann (gunther@math.washington.edu)
indicating the reason for your interest in participating in AIP 2007
and including a budget with the amount of support requested. Please
also arrange for an email letter of reference from one senior
scientist familiar with your research to be sent to Gunther Uhlmann.

The non-junior participants requesting support are asked to send a CV
and an email letter of application to Gunther Uhlmann
(gunther@math.washington.edu) with a budget with the amount of support
requested. Please also indicate that you don't have grant support or
do not have travel support in your grant."

From: 5ICIP <5icip@cosmos.com.ru>
Subject: Extended deadline for abstracts of 5th International
          Conference on Inverse Problems
Date: Fri, 22 Dec 2006

Dear Colleagues

Wishing you A Merry Christmas, I would like to inform you, that 5TH
International Conference on Inverse Problems is in progress. We have
received enough abstracts, but in discussion with some Program
Committee members we understood, that the deadline for abstract

submitting at the Christmas time is very inconvenient for many people. Therefore we have decided to improve the situation and extend the deadline for abstracts till January 20, 2007. Please find enclosed the "last" Call for Papers.

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

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

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

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

Conference Web Page: http://www.cosmos.com.ru/5icip/

Sincerely yours

On behalf of the Organizing Committee
Aleksey Nenarokomov

Aleksey V. Neanrokomov, Ph.D., Dr.Sc.
Professor of Mechanical Engineering
Associate Dean of Aerospace College
Moscow Aviation Institute
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Moscow, 125993, Russia
Tel: 7(095)1584790, Fax: 7(095)1582977
E-mail: Aleksey.Nenarokomov@cosmos.com.ru

From: Kirsten Wilden <Wilden@siam.org>
Subject: SIAM Conference on Mathematics for Industry - CFP Deadlines
Date: Tue, 19 Dec 2006

Conference Name: SIAM Conference on Mathematics for Industry: Challenges and Frontiers

Location: Hyatt Regency Philadelphia, Philadelphia, Pennsylvania

Dates: October 9-11, 2007

The Call for Presentations for this conference is available at: http://www.siam.org/meetings/mi07/

                    Deadlines

March 9, 2007: Minisymposium proposals
April 9, 2007: Abstracts for contributed and minisymposium speakers

For additional information, contact SIAM Conference Department at

meetings@siam.org.

From: Birsen Yazici <yazici@ecse.rpi.edu>
Subject: Post-doctoral position at RPI
Date: Mon, 11 Dec 2006

Post-doctoral position at RPI

As part of a DoD funded project in breast cancer diagnosis and diffuse
optical tomography, Rensselaer Polytechnic Institute is seeking
applications for a post-doctoral research associate position at the
Electrical, Computer and Systems Engineering Department.
Qualifications: Ph.D. Degree in applied mathematics, theoretical
physics, electrical and computer engineering, computer science or
related disciplines. Expertise in numerical solutions of PDEs,
knowledge in inverse problems, interest in diffuse optical imaging and
medical applications, good computing/programming and communication
skills. Position is for 1 year (potentially renewable). Start date
immediately. Interested applicants please send your resume and
references to Dr. Birsen Yazici at yazici@ecse.rpi.edu
<mailto:yazici@ecse.rpi.edu>.

RPI has a well-recognized leadership role in the area of inverse
problems and it offers exceptional work enviroment and competetive
salaries.

From: henning.friis.poulsen@risoe.dk
Subject: Four PhD and post doc positions in reconstruction of x-ray data
Date: Tue, 19 Dec 2006

Four Ph.D. and post doc positions are available at the Centre of
Excellency: "Metal Structures in four Dimensions" at Risoe National
Laboratory in Denmark. The center has been the pioneer behind a new
x-ray imaging technique for in situ 3D visualisation of materials,
known as 3DXRD. This technique is based on tomographic reconstruction
principles in 6 and 12 dimensional spaces and very large data sets,
emerging from 3D detectors. We have a close collaboration with groups
in applied mathematics, e,g. Prof. G. Hermans group at CUNY.

The candidates will be part of an international network aiming at the
design and implementation of new algorithms for 3DXRD. We seek
candidates with a strong background in tomographic reconstruction, and
varying degrees of computer proficiency.

The full text of the announcement can be found at
www.risoe.dk/afm/synch. Applications must include a letter of
motivation, a CV, and the listing of at least two
referees. Applications and inquires should be send by e-mail to
Prof. Henning Friis Poulsen, henning.friis.poulsen@risoe.dk. The
current submission deadline is January 15, 2007.

Submitted by:
Henning Friis Poulsen
Research Professor
Risoe National Laboratory
Dk-4000 Roskilde
+45 4677 5739

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Inverse Problems in Science & Engineering   Dec 2006   Vol. 14, No. 8
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Inverse Problems in Science and Engineering   Jan 2007   Vol 15, No. 1
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Special Issue: Proceedings of the Inverse Problems, Design and
Optimization (IPDO-2004) Symposium Rio de Janeiro, Brazil March 17-19

2004, Guest Editors: Helcio R. B. Orlande and Marcelo J. Colaço

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Using a priori information about a solution of an ill-posed problem
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A maximum entropy approach to update airlines demand distributions
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Identification of stationary noise sources based on a finite element
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Multi-objective approach for robust design optimization problems
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Kuptzov

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Algorithm
Roberto L. Galski, Fabiano L. De Sousa, Fernando M. Ramos, Issamu Muraoka

Estimation of the transverse coefficient of thermal expansion on
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Volume 15 Number 1/January 2007 of Inverse Problems in Science and
Engineering is now available on the journalsonline.tandf.co.uk web site
at *http://journalsonline.tandf.co.uk*
<http://journalsonline.tandf.co.uk/link.asp?id=W76646G46R75>.

Submitted by: Katie Chandler, Publishing Editor,
Applied Science Journals Taylor & Francis
4 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN. Tel: +44 207 017
6295, Fax: +44 207 017 6714. www.tandf.co.uk/journals

From: Lothar Reichel <reichel@math.kent.edu>
Subject: ToC, ETNA, vol 23
Date: Fri, 22 Dec 2006

Electronic Transactions on Numerical Analysis (ETNA)   2006 Vol 23
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A case where balancing is harmful   David S. Watkins

Condition numbers of the Krylov bases and spaces associated with the
truncated QZ iteration   Alexander Malyshev and Miloud Sadkane

Time-discretization of a degenerate reaction-diffusion equation
arising in biofilm modeling   Antonija Duvnjak and Hermann J. Eberl

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finite element method for second order operators in divergence form
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Quasi-Newton preconditioners for the inexact Newton method
L. Bergamaschi, R. Bru, A. Martínez, and M. Putti

Solution of singular elliptic PDEs on a union of rectangles using sinc
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Scalable algebraic multigrid on 3500 processors
Wayne Joubert and Jane Cullum

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On the reduction of a Hamiltonian matrix to Hamiltonian Schur form
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On fast factorization pivoting methods for sparse symmetric indefinite
systems   Olaf Schenk and Klaus Gartner

Parameter-uniform fitted mesh method for singularly perturbed delay
differential equations with layer behavior
M. K. Kadalbajoo and K. K. Sharma

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between parallel plates, I. Finite difference calculations
Kenshu Shimomukai and Hidesada Kanda

A study of the fast solution of the occluded radiosity equation
Kendall Atkinson and David Chien

Iterative sinc-convolution method for solving radiosity equation in
computer graphics   Ahmad Reza Naghsh-Nilchi and Shahram Daroee

Fast multilevel evaluation of smooth radial basis function expansions
Oren E. Livne and Grady B. Wright

Uniformly convergent difference scheme for singularly perturbed
problem of mixed type   Iliya A. Brayanov

On extremal problems related to inverse balayage
Mario Gotz

Approximation of the Hilbert transform via use of Sinc convolution
Toshihiro Yamamoto

Numerical computation of the eigenvalues for the spheroidal wave
equation with accurate error estimation by matrix method
Yoshinori Miyazaki, Nobuyoshi Asai, Dongsheng Cai, and Yasuhiko Ikebe

In 2006 ETNA also is publishing special volumes on

"Saddle Point Problems: Numerical Solution and Applications" edited by
Michele Benzi, Richard B. Lehoucq, and Eric de Sturler (vol 22),

"Orthogonalnt Polynomials and Mathematical Physics" edited by
R. A'lvarez-Nodarse, J. Arvesu', and F. Marcella'n (vol. 24),

"Constructive Function Theory" edited by Wolfgang Dahmen, Jeff
Geronimo, Xin Li, Doron Lubinsky, Igor Pritsker, and Ian Sloan

(vol. 25, in progress)

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

From: Chandler, Katie <Katie.Chandler@tandf.co.uk>
Subject: Table of Contents - Linear and Multilinear Algebra
Date: Wed, 3 Jan 2007

Linear and Multilinear Algebra   Jan 2007   Vol. 55, No. 1
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IPNet Digest   Volume 14, Number 02   Feb 08, 2007

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

Today's Topics:
      Industrial Inverse Problems Workshop/Sandpit
      2007 Inverse Problems Symposium: Registration Information
      5th Int'l Conf. on Inverse Problems: Extended Deadline
      SIAM Conference on Analysis of PDE's
      Postdoc Position in the Inverse Problems Group at RICAM
      Table of Contents: Inverse Problems
      Table of Contents: Inverse Problems in Science & Engineering
      Table of Contents: Linear and Multilinear Algebra
      Table of Contents: Journal of Applied Functional 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.math.msu.edu/ipnet

From: Daniel Lesnic <amt5ld@maths.leeds.ac.uk>
Subject: Industrial inverse problems workshop/sandpit
Date: Wed, 10 Jan 2007

Announcement of Industrial Inverse Problems Workshop/Sandpit,
University of Leeds, 19-20 March 2007

A Knowledge Transfer Workshop/Sandpit on Industrial Inverse Problems
will be held on 19-20 March 2007 at the University of Leeds.

The purpose of the meeting is for industrialists and academics to
identify inverse problems of common interest.
The pragmatics of solving industrial (real-world) inverse problems has
been addressed in Inverse Problems 15 (1999) R1-R40.

The Workshop/Sandpit will follow the format of presentations from
industry by way of introducing the problems on the first day,
followed by intensive work on the problems by groups (academic and
industrial) during the next day.

The workshop will be facilitated by the Industrial Mathematics
Knowledge Transfer Network.

As an outcome of this activity it is hoped that a rapport between
academics and industrialists will be established and cemented through
possible grant proposals for PhD Studentships / CASE Awards and
Post-docs to be submitted to the EPSRC or to other foundations.

Academic participation is open to all members of the inverse problems
community or related subjects, including postgraduate students, for whom
the proposed activity provides an excellent training in oriented
research.

Please note that there are no fees to be charged for participating at
the workshop.

So far, the provisional programme includes the following industrial talks:

Andrew Fellerman (Nexia Solutions Limited) - "Modelling challenges facing the nuclear industry"

Brian Cattle (Nexia Solutions Limited) - "Tomographic techniques in the nuclear industry"

Edward Bullard (Dexela Limited) - "Iterative methods for 3D reconstruction of digital breast tomosynthesis images"

David Gelder (Pilkington Glass) - "Parameter estimation in reaction diffusion problems involving ionic species with limited data"

Manuchehr Soleimani (Wlliam Lee Innovation Centre) - "State of the art EIT/ECT/MIT imaging algorithms, future directions and challenges"

Any suggestions for further industrial speakers on the subject are welcome.

To register for the workshop, academics and industrialists are invited to send their contact details to:

Dr. Daniel Lesnic
Department of Applied Mathematics,
University of Leeds,
Leeds LS2 9JT, UK.
e-mail: amt5ld@amsta.leeds.ac.uk,
tel: +44-(0)113-3435181,
fax: +44-(0)113-3435090

From: "Neil T. Wright" <ntwright@egr.msu.edu>
To: ipnet
Subject: IPS 2007
Date: Thu, 1 Feb 2007

2007 Inverse Problems Symposium
June 11 & 12, 2007
Michigan State University
East Lansing, Michigan, USA

An international group of researchers will present the latest results in Mathematical and Statistical Aspects of Inverse Problems, Design of Experiments, and Applications from areas such as biology, geophysics, heat transfer, economics, and tomography.

Sponsored by Michigan Center for Industrial and Applied Mathematics & the Center for Systems Biology.

Online registration will be available mid-February at
http://www.inverseproblems2007.org .
Early registration (before 1 May 2007): $150 (full) or $75 (student)
Late registration (after 1 May 2007): $200 (full) or $100 (student)
Fee will include the Conference Banquet and a CD of abstracts, with revised chapters from Beck and Arnold, Parameter Estimation in Engineering and Science.

Remember: On the afternoon of Sunday, June 10th, Prof. Erik Goodman
(http://www.egr.msu.edu/~goodman/) will present a 2 hr seminar on
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.

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

For more information, please contact: Neil Wright,
email: ntwright@msu.edu

From: "5ICIP" <5icip@cosmos.com.ru>
Subject: 5th International Conference on Inverse Problems
Date: Wed, 7 Feb 2007

Dear Colleagues

After New Year and Russian Orthodoxal Christmas Holydays, we have some
real technical problems with e-mail from January 7 till January 25
(not only in MAI). Some of you at that time used fax for connection
with Organizing Committee. To check and improve situation we have
decided to extend the deadline for abstracts till February 15,
2007. Please find enclosed the "last" Call for Papers. If you have
sent an abstract at January and have not received any answer, please
repeat the submitting.

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

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

http://www.cosmos.com.ru/5icip/

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

Sincerely yours

On behalf of the Organizing Committee

Aleksey Nenarokomov

Aleksey V. Nenarokomov, Ph.D., Dr.Sc.
Professor of Mechanical Engineering
Associate Dean of Aerospace College
Moscow Aviation Institute, 4 Volokolamskoe Sh.

Moscow, 125993, Russia
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E-mail: Aleksey.Nenarokomov@cosmos.com.ru

Subject: SIAM Conference on Analysis of Partial Differential
Equations (PD07) - Call for Paper Deadlines

Conference Name: SIAM Conference on Analysis of Partial Differential
Equations (PD07)

Location: Hilton Phoenix East/Mesa, Mesa, Arizona

Dates: December 10-12, 2007

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/pd07/

Deadlines

Minisymposium proposals: May 11, 2007

Abstracts for all contributed and minisymposium presentations:
June 11, 2007

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

Postdoc Position at the Inverse Problems Group of the
Johann Radon Institute for Computational and Applied Mathematics
(RICAM), Austrian Academy of Sciences, Linz, Austria

The "Inverse Problems Group", led by Prof.Heinz W. Engl, is searching
for a PostDoc with a strong background in inverse problems or related
fields. The research focus will be adjusted according to the interests
of the successful candidate. Cooperations with other groups at RICAM,
e.g., Optimizaion and Control, Mathematical Finance, Computational
Methods for Direct Field Problems, Mathematical Imaging are strongly
encouraged.

A doctorate in mathematics or a closely related field is required. The
working language is English. The initial contract can be for up to
three years, a renewal for three more years is possible depending on
achievements.

RICAM is a research institute which went into operation on January 1,
2003, and currently has about 60 scientific employees (from 15
countries) in seven areas: Computational Methods for Direct Field
Problems, Inverse Problems, Optimization and Optimal Control, Symbolic
Computing, Analysis of Partial Differential Equations, Mathematical
Finance, Mathematical Imaging. The inverse problems group has 19

scientific members.

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, prefarably by email, to heinz.engl@oeaw.ac.at

Postal address:
Prof. Dr. Heinz W. Engl
RICAM
Altenbergerstrasse 69
A-4040 Linz, Austria

The Austrian Academy of Sciences is an equal opportunity employer.

Submitted by:
Prof.Dr.Heinz W. Engl   E-Mail: heinz.engl@jku.at
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Johannes-Kepler-Universitaet   Phone:+43-(0)732-2468 9219
Altenbergerstrasse 69   secretary: +43-(0)732-2468 9220
A-4040 Linz   Fax:+43-(0)732-2468 8855
http://www.indmath.uni-linz.ac.at/

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents, Inverse Problems, volume 23, issue 1, February 2007
Date: Thu, 25 Jan 2007

Inverse Problems   February 2007   Volume 23, Issue 1
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Y-H Xu and E-X Jiang

An inverse source problem for the heat equation and the enclosure
method   M Ikehata

Cone-beam pseudo-lambda tomography   Y Ye, H Yu and G Wang

An analysis of Tikhonov regularization for nonlinear ill-posed
problems under a general smoothness assumption
S Lu, S V Pereverzev and R Ramlau

On inverse problems for the multidimensional relativistic Newton
equation at fixed energy   A Jollivet

Updating quadratic models with no spillover effect on unmeasured
spectral data   M T Chu, W-W Lin and S-F Xu

A global Carleman estimate in a transmission wave equation and
application to a one-measurement inverse problem
L Baudouin, A Mercado and A Osses

Wronskian solutions of the Boussinesq equation---solitons, negatons,
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On unique determination of partially coated polyhedral scatterers with
far field measurements   H Liu and J Zou

A new phase space method for recovering index of refraction from
travel times   E Chung, J Qian, G Uhlmann and H Zhao

Optimal regularization with two interdependent regularization
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Inverse oscillation theory for Sturm--Liouville problems with
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A procedure for the temperature reconstruction in corner domains from
Cauchy data   T Johansson and L Marin

Explicit inversion formulae for the spherical mean Radon transform
L A Kunyansky

Passive gamma tomography reconstruction of layered structures in
nuclear waste vaults   N S Mera

Convergent simplex searches and the `gloveless DataGlove'
W J Barker and P A Conway

Stability results for a Cauchy problem for an elliptic equation
D N H\`ao, P M Hien and H Sahli

E-mail: liz.martin@iop.org WWW: http://www.iop.org

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Volume 15 Number 2/March 2007 of Inverse Problems in Science and
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Polarizations and differential calculus in affine spaces
Margherita Barile, Fiorella Barone, Wlodzimierz M. Tulczyjew

Bounds for the zeros of polynomials from matrix inequalities II
Fuad Kittaneh, Khalid Shebrawi

An approximate, multivariable version of Specht's theorem
L. W. Marcoux, M. Mastnak, H. Radjavi

Numerical index of some polyhedral norms on the plane
Miguel Martín, Javier Merí

Maps on upper triangular matrices preserving Lie products
Gregor Dolinar

Minimizing the Laplacian spectral radius of trees with given matching
number   Lihua Feng, Qiao Li, Xiao-Dong Zhang

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Growth of solutions of complex non-homogeneous linear differential
equations   B.Belaidi

On closeness of a- and b-points of arbitrary polynomials
G.Barsegian,F.Arturo,Le Dung Trang

Regular singular holonomic systems of differential equations with
given integrals   A.G. Aleksandrov, A.N. Kuznetsov

Basic boundary value problems in complex analysis
H. Begehr

A note on a boundary value problem for the Bitsadze equation
in Wiener-type domains   A.O.Celebi

To elliptic boundary value problems on the upper half-plane
A. Soldatov.

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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Thu, 18 Jan 2007
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Linear Algebra and its Applications   Feb 1 2007 Vol. 421, Issue 1
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Linear Algebra and its Applications Mar 1 2007 Vol. 421, Issues 2-3
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The Minkowski theorem for max-plus convex sets
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On matrix powers in max-algebra
P. Butkovic and R.A. Cuninghame-Green

Dissection of the path-simplex in into n path-subsimplices
Jan Brandts, Sergey Korotov and Michal Krizek

Generators, extremals and bases of max cones
Peter Butkovic, Hans Schneider and Sergei Sergeev

An explicit formula for singular values of the Sylvester-Kac
matrix   Tibor Boros and Pal Rozsa

On relationships between several classes of Z-matrices, M-matrices and
nonnegative matrices   Reinhard Nabben

http://www.sciencedirect.com/science/issue/5653-2007-995789997-642171

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 Topics:

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: AIP 2007
Date: Sun, 25 Feb 2007

             AIP 2007 Second Announcement

The Applied Inverse Problems 2007 Conference and First International
Congress of the International Association of Inverse Problems (IPIA),
to be held in Vancouver, Canada, June 25-29, 2007, will be an exciting
meeting covering a very broad range of topics in inverse problems. The
deadline for registration is April 30, 2007. More details, including
instructions for registration and housing, can be found at the web
page: http://pims.math.ca/science/2007/07aip/.

There is NSF support to attend the conference for junior participants
from US institutions (graduate students and scientists whose PhD was
awarded after June 2001), and also for more senior US participants who
don't have grant support for travel. The deadline for applications is
March 30, 200.

There is also MITACS support to attend the conference for graduate
students and postdocs from Canada. The deadline to apply for support
is April 30, 2007.

Instructions on how to apply for NSF and MITACS support can also be
found at: http://pims.math.ca/science/2007/07aip/.

From: Neil Wright <ntwright@msu.edu>
Subject: IPS 2007 Notice
Date: Sun, 4 Mar 2007 20:47:36 -0500

2007 Inverse Problems Symposium
June 11 & 12, 2007
Michigan State University
East Lansing, Michigan, USA

Abstracts have been submitted by authors from Brazil, Canada, France, Germany, Mexico, Poland, and from around the USA on a wide range of topics related to Inverse Problems.

For more information, a list of the titles and authors, and registration, visit: http://www.inverseproblems2007.org

A reminder to authors: extended abstracts are due 15 April 2007.

A pre-symposium Seminar, Genetic Algorithms with application to Inverse Problems will be presented on Sunday afternoon, June 10th, by Prof. Erik Goodman

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 by James V. Beck, Professor Emeritus, Michigan State University.

Sponsored by
          Michigan Center for Industrial and Applied Mathematics
          Center for Systems Biology
          College of Engineering
          Departments of Chemical and Materials Engineering, Civil
          and Environmental Engineering, Electrical and Computer
          Engineering, Mathematics, Mechanical Engineering

For more information, please contact: Neil Wright,
email: ntwright@msu.edu

Neil Wright
Associate Professor of Mechanical Engineering
2555 Engineering Building
Michigan State University
East Lansing, MI 48824
517-432-4917
517-353-1750 (fax)
ntwright@msu.edu

From: Kirsten Wilden <Wilden@siam.org>
Subject: SIAM Conf. on Applications of Dyn. Systems
Date: Thu, 1 Mar 2007

Subject: SIAM Conference on Applications of Dynamical Systems (DS07)
          Registration and Program
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 ZÃƒï¿½ï¿½Â¼rich, 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

Registration is Now Available!

Pre-Registration Deadline: Thursday, April 26, 2007
Hotel Reservation Deadline: Thursday, April 26, 2007

Registration and the preliminary program for this conference are
available
at: _http://www.siam.org/meetings/ds07/_

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

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: Calderon Prize
Date: Thu, 22 Feb 2007

                        CALDERON PRIZE

The Inverse Problems International Association (IPIA) will award the
first Calderon Prize to a researcher under the age of 40 who has made
distinguished contributions to the field of inverse problems broadly
defined. The Calderon Prize Committee consists of Professor Adrian
Nachman, Professor Lassi Paivarinta, Professor William Rundell
(chair), and Professor Michael Vogelius.

IPIA will present the award at the Applied Inverse Problems 2007
Conference to be held in Vancouver, Canada, June 25-29, 2007. The
award will include a certificate, a $500 prize, and an invitation to
give a plenary lecture at the conference. The prize also includes
reimbursement for reasonable travel expenses to Vancouver.

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

Nominations should be send to Professor William Rundell by April 30,
2007, to the e-mail address rundell@math.tamu.edu. Inquiries should be
also be addressed to Professor Rundell.

From: Rolf Clackdoyle <rolf@ucair.med.utah.edu>
Subject: Inverse Problems postdoctoral position in France
Date: Thu, 8 Mar 2007

A one or two-year postdoctoral position in tomographic image
reconstruction is available immediately in France (near Lyon).
More information is provided below.

Interested candidates should send a CV, a statement of their
research interests, and names of 3 people willing to provide
letters on their behalf. All information should be sent by
e-mail to the three contact names listed below.

Informal inquires are also welcome.

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Available Immediately: Image Reconstruction Postdoc Position in France

A two year postdoctoral postion is available in France, working with a group dealing mainly with image reconstruction problems in the context of CT reconstruction. Depending on the expertise and research interests of the successful candidate, the work could involve, for example, dynamic tomography, region-of-interest tomography (truncated projections), sampling theory in tomography, or other theoretical aspects of classical or cone-beam tomography.

Minimum requirements:

*   a PhD in a related field
*   an understanding of the principles of image reconstruction
*   good oral communication skills in English or French
*   excellent written communication skills in English

French is not required for the position (but some facility in the language would obviously be helpful, and would anyway be acquired to cope with everyday living in France).

Contacts:
-      Rolf Clackdoyle (rolf.clackdoyle@univ-st-etienne.fr)
-      Catherine Mennessier (mennessier@cpe.fr)
-      Laurent Desbat (laurent.desbat@imag.fr)

Submitted by: Rolf Clackdoyle, Directeur de Recherche,
Laboratoire Hubert Curien, UMR CNRS 5516, Universit�ï¿½ï¿½Â© Jean Monnet,
18 rue Professeur Benoit Lauras, 42000 Saint-Etienne, France
tel: +33 (0)477 91 58 30   fax: +33 (0)477 91 57 81
email: rolf.clackdoyle@univ-st-etienne.fr
       (rolf@ucair.med.utah.edu)

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From: Lothar Reichel <reichel@math.kent.edu>
Subject: TOC, ETNA, vol. 25
Date: Mon, 12 Feb 2007

Electronic Transactions on Numerical Analysis (ETNA)   2006   Vol 25
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This is a special volume on "Constructive Function Theory" edited by W. Dahmen, J. Geronimo, X. Li, D. Lubinsky, I. Pritsker, I. Sloan.

approximation on 2D slices
L. Baratchart, J. Leblond, and J.-P. Marmorat

A remark on uniqueness of best rational approximants of degree 1 in L2
of the circle   L. Baratchart

Error controlled regularization by projection W. Dahmen and M. Jurgens

Quadrature-free quasi-interpolation on the sphere
M. Ganesh and H. N. Mhaskar

An integral representation of some hypergeometric functions
K. A. Driver and S. J. Johnston

Weighted approximation of derivatives on the half-line
K. Balazs and T. Kilgore

The circle theorem and related theorems for Gauss-type quadrature rules
W. Gautschi

New constructions of piecewise-constant wavelets   Y. Hur and A. Ron

Orthohogonal polynomials and Ramanujan's q-continued fractions
M. E. H. Ismail and X. Li

Bernstein's weighted approximation on R still has problems
D. S. Lubinsky

On Euler's differential methods for continued fractions   S. Khrushchev

On norms of factors of multivariate polynomials on convex bodies
A. Kroo'

On weighted (0,2)-type interpolation   M. Le'na'rd

Stable multiresolution analysis on triangles for surface compression
J. Maes and A. Bultheel

Distribution of primes and a weighted energy problem
I. E. Pritsker

A note on the sharpness of the Remez-type inequality for homogeneous
polynomials on the sphere   M. Yattselev

Analysis on the unit ball and on the simplex   Y. Xu

More examples on general order multivariate Pade' approximants for
pseudo-multivariate functions   P. Zhou

A partition of the unit sphere into regions of equal area and small
diameter
P. Leopardi

Fine structure of the zeros of orthogonal polynomials, I. A tale of
two pictures   B. Simon

Szego polynomials: a view from the Riemann-Hilbert window
A. Martinez-Finkelshtein

Remarks on restriction eigenfunctions in C^n G. Putinar and M. Putinar

Fourier-Bessel functions of singular continuous measures and their
many asymptotics   G. Mantica

On the eigenstructure of the Bernstein kernel   U. Itai

On one question of Ed Saff   B. Shekhtman

On the exact estimates of the best spline approximations of functions
A. Khatamov

The properties, inequalities and numerical approximation of modified
Bessel functions   J. M. Rappoport

On convergence of orthonormal expansions for exponential weights
H. P. Mashele

>From Taylor to quadratic Hermite-Pade'polynomials   H. Stalh

Open problems in constructive function theory
L. Baratchart, A. Martinez-Finkelshtein, D. Jimenez, D. S. Lubinsky,
H. N. Mhaskar, I. Pritsker, M. Putinar, N. Stylianopoulos, V. Totik,
P. Varju, and Y. Xu

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

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Tue, 6 Mar 2007

Linear Algebra and its Applications 1 April 2007 Vol. 422, Issue 1
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On the maximum multiplicity of an eigenvalue in a matrix whose graph
contains exactly one cycle Rosario Fernandes

On 0,\pm 1 matrices, odd vectors, and bisubmodular polyhedra
Alexander V. Karzanov

A stabilization criterion for matrices
Jinn-Wen Wu, Kuang-Yow Lian and Peter Lancaster

Some observations on the Youla form and conjugate-normal matrices
H. Fassbender and Kh.D. Ikramov

Normalized Leonard pairs and Askey-Wilson relations
Raimundas Vidunas

The spectral radii of a graph and its line graph
Lingsheng Shi

Derivations for a class of matrix function algebras
Benton L. Duncan

Computation of exact inertia and inclusions of eigenvalues (singular
values) of tridiagonal (bidiagonal) matrices   K.V. Fernando

Ordered OLPS and CF Nth numerators   Brian A. Hagler

On the spectral radius of bicyclic graphs with n vertices and
diameter d   Shu-Guang Guo

Spectral radius of graphs with given matching number
Lihua Feng, Guihai Yu and Xiao-Dong Zhang

Matrices related to the Bell polynomials
Weiping Wang and Tianming Wang

Orthogonality of matrices
Carlos Benitez, Manuel Fernandez and Maria L. Soriano

Alexandrov's inequality and conjectures on some Toeplitz matrices
Ivo Klemes

On extremal matrices of second largest exponent by Boolean rank
Bolian Liu, Lihua You and Gexin Yu

The q-numerical radius of weighted shift operators with periodic
weights   Mao-Ting Chien and Hiroshi Nakazato

The tetrahedron algebra and its finite-dimensional irreducible modules
Brian Hartwig

A new rating system for duplicate bridge
Thomas Quint

The eigenvalue distribution on Schur complements of H-matrices
Cheng-yi Zhang, Chengxian Xu and Yao-tang Li

Algebraic isomorphisms and strongly double triangle subspace lattices
Yongfeng Pang and Guoxing Ji

Characterization of the trace by monotonicity inequalities
Airat M. Bikchentaev and Oleg E. Tikhonov

A singular value inequality for Heinz means
Koenraad M.R. Audenaert

Eigenvalues and forbidden subgraphs I   Vladimir Nikiforov

On the completion of a partial integral matrix to a unimodular matrix
Maozhong Fang

Chebyshev type inequalities involving permanents and their applications
Jiajin Wen and Wan-lan Wang

On the span of Hadamard products of vectors
Li Qiu and Xingzhi Zhan

Large matchings from eigenvalues
Sebastian M. Cioaba and David A. Gregory

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Generalized Jordan algebras   Irvin Roy Hentzel and Alicia Labra

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Semiconvergence of two-stage iterative methods for singular linear
systems   Li Wang

Isospectral flows preserving some centrosymmetric structures
G. M. L. Gladwell and Oscar Rojo

http://www.sciencedirect.com/science/issue/5653-2007-995779997-645649

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

Journal of Computational Analysis and Applications 2007 Vol.9
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A fixed point theorem for mappings satisfying a general contractive
condition of operator type   I. Altun, D. Turkoglu

Equivalent conditions for Bergman space and Littlewood-Paley type
inequalities   K. Avetisyan, S. Stevic

A note on multi-variable Gould-Hopper and Laquerre polynomials
A. Bernardini, P. E. Ricci

Application of the Cauchy-Buniakovski-SchwarzÃƒÂ¯Ã‚Â¿Ã‚Â½ inequality to
an
optimal property for cubic splines
A. Bica, V. Caus, I. Fechete, S. Muresan

On a block monotone domain decomposition algorithm for a nonlinear
reaction-diffusion problem   I. Boglaev

On the quasi power increasing sequences   H. Bor

Minimal quadratic oscillation for cubic splines   V. Caus

ChebyshevÃƒÂ¯Ã‚Â¿Ã‚Â½ approximation algorithms for operators with w-
conditional
first derivative   J. Ezquerro, M. Hernandez

Perturbations of Wilson type and mixed type functional equations
Y. Jung, I. Chang

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Regular sampling in wavelet subspaces involving two sequences of
sampling points   A. Garcia, G. Villalon

Law of logarithm and strong law of large numbers for r*-mixing
sequences   G. Cai

A stable iteration procedure for relaxed cocoercive variational
inclusion systems based on (A,h)-monotone operators   H. Lan

Convergence and stability of iterative processes for a pair of
simultaneously asymptotically quasi-nonexpansive type mappings in
convex metric spaces   J. Kim, K. Kim, Y. Nam

Topics in intuitionistic fuzzy metric spaces   S. Kutukcu

Fixed points of contractive mappings in intuitionistic fuzzy metric
spaces   S. Kutukcu, C. Yildiz, D. Turkoglu

Composition followed by differentiation between bloch type spaces
S. Li, S. Stevic

Continuous wavelet transforms based on classical orthogonal
polynomials and functions of the second kind
M. Moncayo, R. Yanez

On applications of Jung-Kim-Srivastava integral operator to a subclass
of starlike functions with negative coefficients
G. Murugusundaramoorthy, N. Magesh

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A bivariate distribution with normal and t marginals
S. Nadarajah

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Construction of affine fractal functions close to classical
interpolants   M. Navascues, M.Sebastian

Existence results for first and second order semilinear differential
inclusions with nonlocal conditions
L. Gorniewicz, S. Ntouyas, D. OÃƒÂ¯Ã‚Â¿Ã‚Â½egan

Variational formulation of the mixed problem for an
integral-differential equation   O. Martin

Summability factor theorems for triangular matrices
E. Savas, B. Rhoades

Generalization common fixed point theorem in complete fuzzy metric
spaces   S. Sedghi, D.Turkoglu, N. Shobe

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The algorithms for the system of equilibrium problems in Banach spaces
C. Shi

Three-step iterative algorithm for generalized set-valued variational
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A finite element computation of eigenvalues of elliptic operators on
compact manifolds   S. Sachs

A new approach to q-zeta function   T. Kim

Approximation by modified Baskakov operators for functions of bounded
variation   J. Wang

A stable fast algorithm for solving linear systems of the Pascal type
X. Wang

Pointwise approximation by the modified Szasz-Mirakyan operators
X. Zeng, X. Chen

Variations of Steffensen method with cubic convergence
Q. Zheng, Z. Liu, R. Bai

Continuity of Fourier transforms of band-limited wavelets
Z. Zhang

Submitted by: George A. Anastassiou,Ph.D, Professor of Mathematics,
Department of Mathematical Sciences The University of Memphis,
Memphis,TN 38152,USA

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model   B. Ferguson

Journal of Concrete and Applicable Mathematics   2007   Vol. 5, no.3
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Journal of Concrete and Applicable Mathematics   2007   Vol. 5, no.4
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------- end -------

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

Today's Topics:
     Int'l Symposium on Advances in Computational Heat Transfer
     SE Atlantic Regional Conference on Differential Equations
        Academic Post in Inverse Problems, etc., Manchester
        Call for Papers: SIAM J. Sci. Computing Special Issue
     Table of Contents: Inverse Problems
     Table of Contents: Mathematics of Control, Signals,and Systems

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

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

From: Graham de Vahl Davis <cht08@cfd.mech.unsw.edu.au>
Subject: CHT-08
Date: Thu, 29 Mar 2007

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

CHT-08:
International Symposium on Advances in Computational Heat Transfer

will take place in Marrakech Morocco on May 11-16, 2008. See

     http://cht08.mech.unsw.edu.au/

This is the fourth symposium on CHT to be organised by ICHMT, and will
be co-sponsored by the CFD Research Laboratory of The University of
New South Wales and the LEEVAM Research Laboratory of the University
of Cergy-Pontoise, France.

CONFERENCE TOPICS

The goal of the symposium is to provide a forum for the exposure and
exchange of ideas, methods and results in computational heat transfer.
Papers on all aspects of computational heat transfer - both
fundamental and applied - will be welcome. Topics to be covered
include, but are not limited to:

biological heat transfer; boundary layer flow and heat transfer;
combustion and fire modelling; computational methods in CHT; double
diffusive convection; internal flow and heat transfer; micro and
nanoscale heat transfer; phase change: solidification and melting,
evaporation and condensation; CHT in porous media; radiative heat
transfer; single and multiphase flow and heat transfer; turbulent heat
transfer; turbulence modelling; and validation of computational
solutions.

TECHNICAL SESSIONS

There will be a number of invited keynote lectures. Contributed
papers will be presented in both oral and poster sessions.

DEADLINES

Abstract submission is open now; the deadline is 1 October 2007
Abstract acceptance will be notified by 1 November 2007
Full length manuscript due 15 December 2007
Notification of acceptance subject to amendment by 15 February 2008
Notification of final acceptance by 15 March 2008
Early registration fee deadline and Final payment date to ensure
    inclusion of papers in the Proceedings: 30 March 2008

FURTHER INFORMATION

For further information about the Symposium, see
http://cht08.mech.unsw.edu.au, or write to Professors Graham de Vahl
Davis
and Eddie Leonardi (Symposium co-chairs) at cht08@cfd.mech.unsw.edu.au,
fax:
+61 2 9663 1222.

                  ===
ICHMT Symposium: CHT-08 Advances in Computational Heat Transfer
                Marrakech, Morocco 11-16 May 2008

          Co-chairs: Graham de Vahl Davis and Eddie Leonardi,
   CFD Research Laboratory, School of Mech. & Manuf. Engineering,
          The University of NSW, Sydney, NSW, Australia 2052

Tel: (+61 2) 9385 4099 / 4252   Fax: (+61 2) 9663 1222
http://cht08.mech.unsw.edu.au/   cht08@cfd.mech.unsw.edu.au
                  ===

From: Maeve Lewis McCarthy <maeve.mccarthy@murraystate.edu>
Subject: SEARCDE conference
Date: Fri, 30 Mar 2007

The 27th annual Southeastern Atlantic Regional Conference on
Differential Equations (SEARCDE) will be held at Murray State
University in Murray, Kentucky on October 19-20, 2007. This year's
plenary speakers are Jeff Borggaard (Virginia Tech), Gerda deVries
(University of Alberta) and Barbara L. Keyfitz (Fields Institute and
University of Houston).

In addition to the principal speakers, there will also be sessions of
twenty minute contributed talks. There may be funding from the
National Science Foundation to provide travel support for advanced
graduate students and recent Ph.D. recipients. Women and minority
participants are especially encouraged to participate in this
conference and to apply for support.

Details on registration, lodging, submission of abstracts, and
applications for support will be available at the conference website
http://campus.murraystate.edu/searcde

We would appreciate it if you would pass this announcement along to
all who might be interested in participating in the conference.

Sincerely,
Maeve L. McCarthy < maeve.mccarthy@murraystate.edu>

K. Renee Fister < renee.fister@murraystate.edu>

From: Bill Lionheart <bill.lionheart@manchester.ac.uk>
Subject: Academic post at Universituy of Manchester
Date: Wed, 28 Mar 2007

The School of Mathematics at the University of Manchester is
recruiting lecturers, specifically "In Applied Mathematics we are
seeking to appoint in any area, and particularly in Continuum
Mechanics, Inverse Problems or Financial Mathematics."

Closing date 30/04/2007
Details
http://www.manchester.ac.uk/aboutus/jobs/academic/vacancy/index.htm?ref=1
08681

Submitted by:
Professor Bill Lionheart
School of Mathematics, University of Manchester
http://www.maths.manchester.ac.uk/~bl Skype:bi111ion

From: Ulrich R=?ISO-8859-1?B?/A==?=de <Ulrich.Ruede@informatik.uni-
erlangen.de>
Subject: 2nd Call for Papers: SISC Special Issue on CS&E
Date: Thu, 05 Apr 2007

2nd call for papers for the

    SIAM J. Scientific Computing

Special Issue on Computational Science & Engineering

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

Deadline for the submission of papers: April 30, 2007

Submission:
Manuscripts and a cover letter should be submitted via SISC's online
submission system, see www.siam.org/journals/sisc.php

Additional information:
    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

From: Liz Martin <liz.Martin@iop.org>

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The reconstruction of surface tangential components of the
electromagnetic field from near-field measurements
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Transmission traveltime tomography based on paraxial Liouville
equations and level set formulations   S Leung and J Qian

Why is the Cauchy problem severely ill-posed?   F Ben Belgacem

Some considerations concerning regularization and parameter choice
algorithms   F Bauer

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
http://stacks.iop.org/IP/23/i=2

From: Magrijn <magrijn.secsup@tip.nl>
Subject: MCSS E-letter Volume 19 Number 1 2007
Date: Mon, 12 Mar 2007

Mathematics of Control, Signals, and Systems 2007 Vol. 19, No. 1
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Further results on Lyapunov functions for slowly time-varying systems
F. Mazenc and M. Malisoff

A complete model of a finite-dimensional impedance-passive system
M. Kurula and O. Staffans

Minimax games for stochastic systems subject to relative entropy
uncertainty: applications to SDE's on Hilbert Space
N.U. Ahmed and C.D. Charalambous

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

Please submit new papers via the Springer website for MCSS
http://mcss.edmgr.com

Eduardo Sontag and Jan H. van Schuppen (Editors)

Contributed by Jan H. van Schuppen (mcss@cwi.nl)
------- end -------

IPNet Digest   Volume 14, Number 05   May 14, 2007

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

Today's Topics:
      Inverse Problems International Association (IPIA)
      Sixth Int'l. Conf. on Inverse Problems in Engineering 2008
      Algorithmic Challenges in Emerging Applications of Computing
      ACM-SIAM Symposium on Discrete Algorithms
      PhD/Postdoc Positions: Deconvolution Problems in Optical Nanoscopy
      Inverse Problems Editorial Board highlights 2006
      Table of Contents: Inverse Problems in Science & Engineering
      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: Gunther Uhlmann <gunther@math.washington.edu>
Subject: Inverse Problems International Association
Date: Sun, 13 May 2007

            Inverse Problems International Association

The Inverse Problems International Association (IPIA) has been founded
to promote the field of inverse problems at all levels. Please find
more details about IPIA at the URL:

    http://www.inverse-problems.net/

We invite all scientists working on inverse problems, broadly
interpreted, to join the association by registering at the page

    http://www.inverse-problems.net/register.php

The first International Congress of IPIA will be AIP 2007 to be held in
Vancouver, Canada, June 25-29, 2007. There will also be a general meeting
of IPIA during the meeting.

Sincerely,

Gunther Uhlmann for the Executive Committee of IPIA.

From: Int. Conf. on Inverse Problems in Engineering 2008
Subject: First announcement, 6th Int. Conf. on Inverse Problems
        in Engineering
Date: Tue, 24 Apr 2007

Dear Colleague,

We are pleased to announce the forthcoming 6th International
Conference on Inverse Problems in Engineering: Theory and Practice
(ICIPE 2008), to be held in Dourdan (Paris), France on June 15-19,
2008.

This Symposium is the sixth of the International Conference on Inverse Problems in Engineering: Theory and Practice (ICIPE) series, initiated in Palm Coast (USA) in 1993. Noteworthy features of all ICIPE meetings are their balanced focus on theory and applications (and, better yet, the combination of both) and a residential setting in an informal atmosphere aimed at maximizing opportunities for interactions between participants. The previous ICIPE was held in Cambridge (UK) in July 2005.

Please visit the Conference website http://www.icipe2008.ciril.fr for details. The deadline for abstract submission is October 15, 2007.

We look forward to welcoming you in Dourdan next year.

With our best wishes,

The ICIPE 2008 organizing committee:
Denis Maillet (chairman),
StÃƒï¿½ï¿½Â©phane Andre, Marc Bonnet, Andrei Constantinescu,
Abdellatif El Badia, Yvon Jarny.

From: "Doina Bein" <siona@utdallas.edu>
Subject: Mini-track on Algorithmic Challenges in Emerging Applications
        of Computing
Date: Sun, 6 May 2007

Call for Papers:
Mini-track on Algorithmic Challenges in Emerging Applications of
Computing

Hawaii International Conference on System Sciences (HICSS-41)
January 7-10, 2008 Hilton Waikoloa Village on the Big Island,
http://www.hicss.hawaii.edu/hicss_41/fstcfp41.htm

Deadline: June 15, 2007, via the conference website,
http://www.hicss.hawaii.edu/hicss_41/apahome41.html
(Proceedings IEEE Computer Society)

Track Theme:
Algorithmic challenges arise in many emerging areas of
computing. Security, bioinformatics, quantum computing, power
management and algorithmic game theory are examples of such areas. For
instance, in the area of algorithmic game theory, economic agents are
in varying degrees of collaboration and competition, and questions
about equilibria arise. The study of combinatorial auctions gives
insight into- complex interactions of such agents on the Internet. In
the area of power management for mobile devices like PDAs, sensors,
cell phones and laptops, improvements in battery technology lag behind
the dramatic improvement in hardware. Online algorithms allow power
management schemes to schedule resources without full knowledge of
future demands. In information security, investigations into
efficient algorithms for secure dissemination of information,
cyberforensics, and prevention of cybercrime are in great demand.
This mini-track explores algorithmic challenges in these and other
realms involving online and randomized algorithms, scheduling theory,
approximation algorithms, optimization, and algorithmic complexity.

Program Committee

Doina Bein, University of Texas at Dallas, USA
Wolfgang Bein, University of Nevada, Las Vegas, USA (Track Co-Chair)
Said Bettayeb, University of Houston, Clear Lake, USA
Francis Chin, University of Hong Kong, China
Hyunseung Choo, Sungkyunkwan University, Korea
Josï¿½ï¿½Â© R. Correa, Universidad Adolfo Ibï¿½ï¿½Â¡Ãï¿½ï¿½Â±ez,
Chile
Vladimir Deineko, University of Warwick, UK
Camil Demetrescu, University of Rome "La Sapienza", Italy
Leszek Gasieniec University of Liverpool, UK
Qianping Gu, Simon Fraser University, Canada
Kazuo Iwama, Kyoto University, Japan
Bruce Litow, Cook University of North Queensland, Australia
Meena Mahajan, The Institute of Mathematical Sciences, India
Eiji Miyano, Kyushu Institute of Technology Japan
Linda Morales, Texas A&M University, Commerce USA (Track Co-Chair)
John Noga, California State University, Northridge, USA
Shietung Peng, Hosei University, Japan
Stefan Pickl, University of the Armed Forces, Munich, Germany
Kirk Pruhs, University of Pittsburgh, USA
Ruediger Reischuk, University of Luebeck, Germany
Hal Sudborough, University of Texas at Dallas, USA
Steve,Tate, University of North Texas, USA
John Paul Vergara, Ateneo de Manila University, Philippines
Guochuan Zhang, Zhejiang University, China

Submitted by: Dr. Doina Bein, Department of Computer Science,
University of Texas at Dallas, Richardson, TX 75083
Phone: (972) 883 6444   siona@utdallas.edu
Fax: (972) 883 2349   www.utdallas.edu/~siona

From: "Kirsten Wilden" <Wilden@siam.org>
Subject: ACM-SIAM Symposium on Discrete Algorithms (SODA08) - CFP
Date: Fri, 13 Apr 2007

Conference Name:
ACM-SIAM Symposium on Discrete Algorithms (SODA08)

Conference Program Chair:
Shang-Hua Teng, Boston University and Akamai Technologies, Inc.

Location:
Holiday Inn Golden Gateway, San Francisco, California

Dates:
January 20-22, 2008

The Call for Presentations for this symposium is available at:
http://www.siam.org/meetings/da08/

Submission Deadline:
July 6, 2007

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

From: Thorsten Hohage <hohage@math.uni-goettingen.de>
Subject: 2 PhD + 1 postdoctoral positions: Deconvolution problems

in optical nanoscopy
Date: Tue, 08 May 2007

Starting from July 2007, 2 PhD and one postdoctoral position will be
available at the Department of Mathematics at the University of
Goettingen within the project "Deconvolution problems with sparsity
constraints in optical nanoscopy and mass spectroscopy" given final
approval of funding by the German Ministry of Education (BMBF).

Qualifications: Master degree (or PhD, rsp.) in mathematics, physics
or related areas and expertise in at least one of the following
fields: inverse problems, nonparametric statistics, optimization or
scientific computing.

Applications with the usual documents (cv, reports, letters of
recommendation) can be submitted to Prof. Thorsten Hohage at
hohage@math.uni-goettingen.de until June 15, 2007. For further
information see
    www.num.math.uni-goettingen.de/hohage/BMBF_english.pdf

From: Adam Phillips <adam.phillips@iop.org>
Subject: Inverse Problems Editorial Board highlights 2006
Date: Fri, 11 May 2007

We are delighted to announce the Inverse Problems Editorial Board
highlights 2006 :
http://www.iop.org/EJ/journal/-page=extra.highlights/0266-5611

The Editorial Board of Inverse Problems have selected articles
published in 2006 to be highlighted on the journal web page and we
invite you to view this taster of the high quality content published
last year. This is intended not as a list of the 'best' articles, but
as an interesting and stimulating reading list. Articles were selected
for many reasons, some contain outstanding research and breakthroughs,
some may have an especially clear exposition and are beautifully
presented, others are instructive, containing results and tools useful
to many readers. We are pleased to make these articles freely
available and very much hope that you will enjoy reading them.

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BS1 6BE England Vat No GB 461 6000 84.

From: "Chandler, Katie" <Katie.Chandler@tandf.co.uk>
Subject: Table of Contents - Inverse Problems in Science and Engineering
Date: Thu, 10 May 2007 08:26:26 +0100

Inverse Problems in Science and Engineering   2007 Vol. 15 Issue 3
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An inverse problem of reconstructing the electrical and geometrical
parameters characterising airframe structures and connector interfaces
C. MaCkay, D. Hayward, S. McKee, A. J. Mulholland, and R. A. Pethrick

Numerical analysis of an ill-posed Cauchy problem for a
convection--diffusion equation   Z. Ranjbar and L. Elden

Multi-phase permittivity reconstruction in electrical capacitance

tomography by level-set methods   Weifu Fang

A modified method for determining the surface heat flux of IHCP
Z. Qian, C.-L. Fu, and X.-T. Xiong

Numerical methods for the reconstruction of dynamic magnetic resonance
images   G. Landi and E. Loli Piccolomini

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Special Issue devoted to papers presented at the Aveiro Workshop on
Graph Spectra, Aveiro Workshop on Graph Spectra
University of Aveiro, Mathematics Department, 10-12 April 2006
Edited by D. Cvetkovic, W. Haemers and P. Rowlinson

Leonardo Silva de Lima, Nair Maria Maia de Abreu, Carla Silva Oliveira
and Maria Aguieiras Alvarez de Freitas

Star complements and exceptional graphs
D. Cvetkovic, P. Rowlinson and S.K. Simic

Signless Laplacians of finite graphs
D. Cvetkovic, Peter Rowlinson and Slobodan K. Simic

Research problems from the Aveiro Workshop on Graph Spectra
Dragan Stevanovic

http://www.sciencedirect.com/science/issue/5653-2007-995769998-646754

digraphs   Aiping Deng, Iwao Sato and Yaokun Wu

The minimal spectral radius of graphs with a given diameter
E.R. van Dam and R.E. Kooij

Hadamard powers and totally positive matrices
Shaun M. Fallat and Charles R. Johnson

On invertible matrices over antirings   Yijia Tan

Specializations and extensions of the quantum MacMahon Master Theorem
Dominique Foata and Guo-Niu Han

Ascent, descent, nullity, defect, and related notions for linear
relations in linear spaces
Adrian Sandovici, Henk de Snoo and Henrik Winkler

A new Bartholdi zeta function of a digraph
Hirobumi Mizuno and Iwao Sato

A matrix subadditivity inequality for f(A+B) and f(A)+f(B)
Jean-Christophe Bourin and Mitsuru Uchiyama

Corrigendum to: "Positive, path product, and inverse M-matrices"
[Linear Algebra Appl. 421 (2007) 328-337]
Charles R. Johnson and Ronald L. Smith

http://www.sciencedirect.com/science/issue/5653-2007-995769997-648890

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall,
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Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans
------- end -------

IPNet Digest   Volume 14, Number 06   July 18, 2007

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

Today's Topics:
      4th Int'l Conf: Inverse Problems: Modeling & Simulation
      Workshop: Math. Methods in Biomedical Imaging, IMRT
      SIAM Conference: Mathematics for Industry: Challenges/Frontiers
      SIAM Conference: Optimization
      SIAM Conference: Mathematical Aspects of Materials Science
      SIAM Conference: Data Mining
      SIAM Conference: Numerical Combustion
      Postdoctoral Position on Inverse Problems in France
      CD Book on Integrals related to Heat Conduction/Diffusion
      Inverse Problems Newsletter Now Online
      Table of Contents: Inverse Problems
      Table of Contents: Inverse Problems in Science & Engineering
      Table of Contents: Linear Algebra and Its Applications
      Table of Contents: Int'l Journal of Mathematics and Statistics

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

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

From: arzu erdem <erdem.arzu@gmail.com>
Subject: 4th Int'l Conf: Inverse Problems: Modeling and Simulation
Date: Fri, 18 May 2007

Dear Colleagues,

The *Fourth International Conference "Inverse Problems: Modeling and
Simulation"* will be held during May 26 - 30, 2008, in the historic
city of Oludeniz - Fethiye, on the Mediterranean Sea, in Turkey. The
main aim of the Conference is to combine presentations in the theory
and applications of inverse problems from groups all over the
world. Our forum will bring together all classical and new inverse
problems from international scientific schools. The focus will be on
new challenges of inverse problems in current interdisciplinary
science and future directions. Continuing the traditions of the
previous three international conferences "Inverse Problems: Modeling
and Simulation", this Conference will also be held under the auspices
of the leading international journals "Inverse Problems", "Inverse and
Ill-Posed Problems" and "Inverse Problems in Science and
Engineering". The organizers of the Conference, in particular the
Oludeniz Municipality, will work to put together an excellent
scientific program with social programs consisting of tours to
historic places and boat rides.

We welcome you to the Fourth International Conference "Inverse Problems:
Modeling and Simulation".

CHAIRS:

H. T. Banks
Center for Research in Scientific Computation, N.C.State University, USA

< htbanks@eos.ncsu.edu <mailto:htbanks@eos.ncsu.edu>>

A. Hasanov (Hasanoglu)
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<ahasanov@kou.edu.tr <mailto:ahasanov@kou.edu.tr>>

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<kabanikh@math.nsc.ru <mailto:kabanikh@math.nsc.ru>>

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<mailto:franz.kappel@uni-graz.at>>

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alemdar.hasanoglu@gmail.com <mailto:alemdar.hasanoglu@gmail.com>
http: http://fef.kou.edu.tr/matematik/ Faculty of Arts and Sciences

Arzu Erdem
E-mail: erdem.arzu@gmail.com <mailto:erdem.arzu@gmail.com>
aerdem@kou.edu.tr <mailto:aerdem@kou.edu.tr>

 Web page of the Inverse Problems Conference-2008:
http://ipms-conference.org <http://ipms-conference.org/>

From: Yair Censor <yair@math.haifa.ac.il>
Subject: Workshop on Mathematical Methods in Biomedical Imaging and
 Intensity-Modulated Radiation Therapy (IMRT), in Pisa, Italy in October
 2007.
Date: Wed, 18 Jul 2007

An Interdisciplinary Workshop on Mathematical Methods in Biomedical
Imaging and Intensity-Modulated Radiation Therapy (IMRT) will be held
at the Centro di Ricerca Matematica Ennio De Giorgi in Pisa, Italy,
from October 15 to October 19, 2007.

Information about the Workshop, including the list of participants and
the
list of invited speakers, can be found at the Centro De Giorgi's web
pages, at the address: http://www.crm.sns.it or at:
http://www.crm.sns.it/cgi-bin/pagina.pl?Id=85&Tipo=evento&TipoEvento=
workshops&Sezione=Aims%20and%20Research%20Directions&Periodo=future

There are no registration fees to attend the Centro's activities, and
anyone with an interest in the program is warmly invited to
participate at any stage.

You are very welcome to attend part or all of the activities of this
Workshop. please make your own arrangements and register (no fee) on:
http://www.crm.sns.it/cgi-bin/pagina.pl?Id=85&Tipo=evento&TipoEvento=
workshops&Sezione=Registration&Periodo=future

Any questions regarding the workshop or the Centro De Giorgi should be directed to Ms. Ilaria Gabbani <crm@crm.sns.it>. Please do not hesitate to contact us.

The Organizing Committee:
Yair Censor, University of Haifa (yair@math.haifa.ac.il)
Ming Jiang, Peking University (ming-jiang@pku.edu.cn)
Alfred K. Louis, Universitet des Saarlandes (louis@num.uni-sb.de)

Submitted by: Prof. Yair Censor, Dept. of Mathematics, Univ. of Haifa, Haifa, Israel.   Homepage: http://math.haifa.ac.il/censor.html

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From: "Kirsten Wilden" <Wilden@siam.org>
Subject: SIAM Conference on Mathematics for Industry - Registration and Program
Date: Tue, 10 Jul 2007

Subject: SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI07) - Registration and Program Now Available!

Conference Name: SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI07)

Location: Hyatt Regency Philadelphia, Philadelphia, Pennsylvania

Dates: October 9-11, 2007

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Registration is Now Available!

Pre-Registration Deadline: September 11, 2007
Hotel Reservation Deadline: September 11, 2007

Registration and the preliminary program for this conference are available at: http://www.siam.org/meetings/mi07/
   ++++++++++++++++++++++++

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

From: "Nicole C. Jorlett" <Jorlett@siam.org>
Subject: SIAM Conference on Optimization (OP08) - CFP
Date: Tue, 10 Jul 2007

Subject: SIAM Conference on Optimization (OP08) -
Call for Paper Deadlines

Conference Name: SIAM Conference on Optimization

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

Dates: May 10-13, 2008

Invited Plenary Speakers:
Etienne de Klerk, Tilburg University, Netherlands
Matthias Heinkenschloss, Rice University
Jan Modersitzki, University of Lubeck, Germany

Annick Sartenaer, Universite Notre Dame de la Paix, Belgium
Stefan Scholtes, Cambridge University, United Kingdom
Pascal Van Hentenryck, Brown University
Andreas Wechter, IBM Research
Robert Weismantel, University of Magdeburg, Germany

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/op08/

                         Deadlines

Minisymposium proposals: October 9, 2007 EDT

Abstracts for all contributed and minisymposium presentations: November
8, 2007 EST

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

Subject: SIAM Conference on Mathematical Aspects of Materials Science
(MS08) - CFP Deadlines

Conference Name: SIAM Conference on Mathematical Aspects of Materials
Science (MS08)

Location: Doubletree Hotel Philadelphia, Philadelphia, Pennsylvania

Dates: May 11-14, 2008

Invited Plenary Speakers (partial list):
Eric Cances, CERMICS - ENPC, France
Sergio Conti, Universit~Duisburg-Essen, Germany
Tomas Diaz de la Rubia, Lawrence Livermore National Laboratory
Richard D. James, University of Minnesota
Robert V. Kohn, New York University
Errico Presutti, Universit?i Roma "Tor Vergata," Italy
Dwight Streit, Northrop Grumman Space Technology
Sandra Troian, California Institute of Technology

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/ms08/

                         Deadlines

October 12, 2007, midnight EDT: Minisymposium proposals
November 12, 2007, midnight EST: Abstracts for contributed and
minisymposium speakers

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

Subject: SIAM International Conference on Data Mining (SDM08) - Call for
Paper Deadlines

Conference Name: SIAM International Conference on Data Mining

Location: Hyatt Regency Hotel, Atlanta, Georgia

Dates: April 24-26, 2008

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/sdm08

Deadlines

Abstract due: October 5, 2007

Manuscripts due: October 12, 2007

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

From: Kirsten Wilden <Wilden@siam.org>
Subject: SIAM Int'l Conf. on Numerical Combustion - CFP
Date: Tue, 26 Jun 2007

Subject: SIAM International Conference on Numerical Combustion (NC08)-
CFP Deadlines

Conference Name: SIAM International Conference on Numerical Combustion
(NC08)

Location: Portola Plaza Hotel at Monterey Bay, Monterey, California

Dates: March 31-April 2, 2008

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/nc08/

Deadlines

August 31, 2007: Minisymposium proposals
September 28, 2007: Abstracts for contributed and minisymposium
speakers.

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

From: Rolf Clackdoyle <rolf@ucair.med.utah.edu>
Subject: Inverse Problems postdoctoral position in France
Date: Tue, 17 Jul 2007

A one year postdoctoral position in tomographic image
reconstruction is available immediately in France (near Lyon).
More information is provided below.

Interested candidates should send a CV, a statement of their
research interests, and names of 3 people willing to provide

letters on their behalf. All information should be sent by
e-mail to the three contact names listed below.

Informal inquires are also welcome.

Rolf CLACKDOYLE
Directeur de Recherche
Laboratoire Hubert Curien, UMR CNRS 5516
Universit~ean Monnet
18 rue Professeur Benoit Lauras
42000 Saint-Etienne, France

tel: +33 (0)477 91 58 30
fax: +33 (0)477 91 57 81
email: rolf.clackdoyle@univ-st-etienne.fr
       (rolf@ucair.med.utah.edu)

Available Immediately: Image Reconstruction Postdoc Position in France

A one year postdoctoral postion is available in France, working with a
group dealing mainly with image reconstruction problems in the context
of CT reconstruction. Depending on the expertise and research
interests of the successful candidate, the work could involve, for
example, dynamic tomography, region-of-interest tomography (truncated
projections), sampling theory in tomography, or other theoretical
aspects of classical or cone-beam tomography.

Minimum requirements:

 *   a PhD in a related field
 *   an understanding of the principles of image reconstruction
 *   good oral communication skills in English or French
 *   excellent written communication skills in English

French is not required for the position (but some facility in the
language would obviously be helpful, and would anyway be acquired to
cope with everyday living in France).

Contacts:
 -        Rolf Clackdoyle (rolf.clackdoyle@univ-st-etienne.fr)
 -        Catherine Mennessier (mennessier@cpe.fr)
 -        Laurent Desbat (laurent.desbat@imag.fr)

From: James Beck <jamesverebeck@comcast.net>
Subject: CD Book on Integrals related to Heat Conduction/Diffusion
Date: Tue, 26 Jun 2007

The CD book, "Handbook of Integrals Related to Heat Conduction and
Diffusion" by Donald E. Amos is available for the nominal cost of $15
including postage and handling from Albuquerque, New Mexico, USA. Many
of these integrals are useful in analytical multi-dimensional problems
involving error functions; they are not otherwise available.

Contact Don at DEAmos@swcp.com.

From: Kate Watt <Kate.Watt@iop.org>

Subject: Inverse Problems Newsletter now online
Date: Mon, 2 Jul 2007

Inverse Problems is pleased to announce the latest developments in the
journal; including a comprehensive back catalogue of our Special
Sections and Topical Reviews which we hope will be of great interest
to the community. A new webpage has also been created detailing how
you can include multimedia enhancements to your paper, with
outstanding examples included. In addition to this, a new selection of
FREE featured articles has been added to the collection on the
journal's webpage and our Editorial Board Highlights of 2006 are still
freely available to read. To view these articles and take advantage of
the latest facilities IP has made available to the community visit
IP's Newsletter here:
http://herald.iop.org/IPnewsletterIPNet/m13/cid//link/790.

Submitted by: Kate Watt, Publisher, Inverse Problems,
IOP Publishing, Dirac House, Temple Back, Bristol, BS1 6BE, UK
Tel: +44 (0)117 929 7481(x1302)   e-mail: ip@iop.org
Fax: +44 (0) 117 920 0858   www: www.iop.org/journals/ip

From: Liz Martin <liz.Martin@iop.org>
Subject: Contents list for Inverse Problems, volume 23, issue 3, June
2007
Date: Wed, 23 May 2007

Inverse Problems   June 2007   Volume 23, Issue 3
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Fisher information analysis for two-dimensional microwave tomography
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An inverse problem for higher order differential operators on
star-type graphs   V A Yurko

Scattering theory for Jacobi operators with a steplike quasi-periodic
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On the inverse problem for the Dirac operator
X Li

Reconstruction method for inverse Sturm--Liouville problems with
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Analysis versus synthesis in signal priors
M Elad, P Milanfar and R Rubinstein

Sparsity and incoherence in compressive sampling
E Cand\`es and J Romberg

A convergence rates result for Tikhonov regularization in Banach
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Uniqueness and stability in an inverse problem for the Schr\"odinger
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L Baudouin and J-P Puel

Inverse Problems in Science and Engineering   Volume 15 Issue 4
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is now available online at www.informaworld.com/IPSE
<http://www.informaworld.com/IPSE>

Special Issue: Mini-Symposium on Inverse Problems Methods and
Applications, 5th International Congress on Industrial and Applied
Mathematics Sydney, Australia July 7-11, 2003

Special Issue-IPSE/ICIAM

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<http://www.informaworld.com/openurl?genre=issue&issn=1741-
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S.J. Kirkland, Michael Neumann and Jianhong Xu

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(structured) linear algebra   Stefano Serra-Capizzano

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Vyacheslav Futorny and Vladimir V. Sergeichuk

22) How real is your matrix?   Marko Huhtanen

23) Idempotency of linear combinations of three idempotent matrices,
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Oskar Maria Baksalary and Julio Benitez

http://www.sciencedirect.com/science/issue/5653-2007-995759998-652860

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Kazumasa Nomura and Paul Terwilliger

Positive real matrices in indefinite inner product spaces and
invariant maximal semidefinite subspaces
J.H. Fourie, G.J. Groenewald and A.C.M. Ran

Linear bijections which preserve the diameter of vector-valued maps
A. Aizpuru and M. Tamayo

Derivations of the Lie algebra of strictly upper triangular matrices
over a commutative ring   Shikun Ou, Dengyin Wang and Ruiping Yao

http://www.sciencedirect.com/science/issue/5653-2007-995759997-656936

Submitted by: Hans Schneider, Mathematics Department, Van Vleck Hall,
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Math Dept Fax: 608-263-8891   http://www.math.wisc.edu/~hans

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Univariate 3-channel Wavelet Filter Banks from Centrally Symmetric
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On Minkowski and Hardy Integral Inequalities for Generalized Shift
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On the inner curvature of the second fundamental form of ruled
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Splitting operator for solving the neutron transport equation in 1-D
spherical geometry   Abdelkader Tizaoui

Simulation of EW Wave Generation via Quadratic B-spline Finite
Element Method Idris Dag, Dursun Irk and Ahmet Boz

Constructing the Euler-Maclaurin Formula Vito Lampret

Numerical Solution of the Modified Burgers Equation by the Quintic
B-spline Galerkin Finite Element Method
Bulent Saka, Idris Dag and Dursun Irk

www.isder.ceser.res.in/ijms.html
------- end -------

Today's Topics:
      Call for Papers: Int'l Conf. on Inverse Problems, Modeling &
Simulation
      Call for Papers: SIAM Conference on Imaging Science
      Postdoctoral Position in Tomographic Image Reconstruction at RPI
      Post-doc/Researcher Positions in Applied Math at T.U. Lisbon
      Special Issue of Applicable Analysis on Inverse Problems
      Table of Contents: Inverse Problems
      Table of Contents: Mathematics of Control, Signals, and Systems

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

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

From: erdem.arzu@gmail.com
Date: 9/7/2007
Subject: Announcement of the Fourth International Conference "IPMS",
Fethiye, Turkey

Dear Colleague,

We are pleased to announce the forthcoming 4th International Conference
"Inverse Problems: Modeling and Simulation" (IP:MS 2008), to be held in
the historic city of Oludeniz - Fethiye, on the Mediterranean Sea, in
Turkey, on May 26-30, 2008.

You are cordially invited to propose contributions to IP:MS 2008.
The abstract submission should be sent to the following e-mail
addresses:

erdem.arzu@gmail.com , aerdem@kou.edu.tr.

Abstracts will be published before the conference, and all participants
will obtain copies during the Conference.

The Conference web site http://ipms-conference.org of the conference
features other details and will be continually updated.

The International Conferences "Inverse Problems: Modeling and
Simulation" are organizing in a two-year cycle at the end of May, in the
historic city of Oludeniz - Fethiye, on the Mediterranean Sea, in
Turkey. The main aims of these conference is to promote unity through
diversity and to encourage worldwide interest in the theory and
applications of inverse problems. Our forum is going to bring together
leading scientists from many different countries and many speciality
applications. All these conferences are organizing under the auspices of
the leading international journals "Inverse Problems", "Inverse Problems
in Science and Engineering" and "Inverse and Ill-Posed Problems". The
organizers of the Conference, in particular the Oludeniz Municipality,
are putting together an excellent social program consisting of tours to
historic places and boat rides.

We look forward to welcoming you in Oludeniz-Fethiye, Turkey next year.

With our best wishes,
  On behalf of the International Program/Organizing committees
  H. T. Banks, A.Hasanov (Hasanoglu), S. Kabanikhin, F. Kappel.

From: Kristen Wilden <Wilden@siam.org>
Date: 9/5/2007
Subject: SIAM Conference on Imaging Science (IS08) - CFP Posting

Subject:
SIAM Conference on Imaging Science (IS08) - CFP Deadlines

Conference Name:
SIAM Conference on Imaging Science (IS08), being held jointly with the
2008 SIAM Annual Meeting

Location:
Town & Country Resort and Convention Center, San Diego, California

Dates:
July 7-9, 2008

Invited Plenary Speakers:

Joint Plenary Speaker
Jean-Michel Morel, ENS Cachan, France

Invited Topical Speakers
John Etgen, BP America
Jeffrey Fessler, University of Michigan, Ann Arbor
Mila Nikolova, Centre de Mathématiques et de Leurs Applications, France
Lenny Rudin, Cognitech Inc.
Lars Ulander, Swedish Defense Research Agency, Sweden
Andrew Zisserman, University of Oxford, United Kingdom

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/is08/

                        Deadlines

January 7, 2008: Minisymposium proposals
January 21, 2008: Abstracts for contributed and minisymposium speakers

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

From: Birsen Yazici <yazici@ecse.rpi.edu>
Date: 8/9/2007
Subject: Post-doctoral Position at Rensselaer Polytechnic Institute

A postdoctoral position in tomographic image reconstruction is available
immediately at Rensselaer Polytechnic Institute. The project involves
applications of microlocal techniques to synthetic aperture imaging
problems. The position is for one year with a possible extension to
second and third years. Start date for the position is September-October
2007. Interested candidates please send your CV and names of 3

references to yazici@ecse.rpi.edu.

Submitted by: Birsen Yazici
Department of Electrical, Computer and Systems Eng.
Rensselaer Polytechnic Institute
110 8th Street
Troy, NY 12180
Web: www.ecse.rpi.edu/~yazici

From: Carlos Alves <calves@math.ist.utl.pt>
Date: 7/27/07
Subject: Post-doc/researcher positions in Applied Mathematics -
T.U.Lisbon

Two Post-doc/researcher positions Center for Mathematics and its
Applications Instituto Superior Técnico Technical University of Lisbon
PORTUGAL

We would like to draw your attention for the fact that CEMAT (Center for
Mathematics and its Applications of IST) offers 2 research positions in
the fields of Statistics and Stochastic Processes or Computational
Mathematics, Numerical Analysis and Partial Differential Equations.

The candidates should hold a PhD in Applied Mathematics, Statistics,
Operations Research, Mechanical Engineering, Physics or
similar.Candidates should have a high quality research record and at
least 3 years of post-doctoral research experience.

The successful candidates will receive a salary in accordance with the
university regulations for a senior researcher. The contracts offered
will have the duration of up to 5 years, renewed yearly based on mutual
agreement. The minimum annual gross income, before taxes, will be
3,038.06 Euros x 14 months.

The interested candidates should sent, until August 31, 2007, an email
to Prof. António Pacheco (apacheco@math.ist.utl.pt) with the
followinginformation:

- Identification
- Curriculum Vitae/resume
- Letters of Reference (with contacts information: e-mail addresses and
phone numbers)
- Statement of purpose for the period of the contract

For more information, please see

http://www.ist.utl.pt/files/ciencia2007/EditalConcursosDoutoradosIST_CEMA
T.pdf

Please tramsmit this information to anyone you think may be interested
in the positions.

Best regards,
António Pacheco
(President of CEMAT)

From: Michael Klibanov <mklibanv@uncc.edu>
Date: 8/2/2007

Subject: A special volume of APPLICABLE ANALYSIS for Inverse Problems

Dear Colleagues:

Applicable Analysis wishes to become a leading journal in the area of
Inverse Problems. As a first step in this direction, the Editorial Board
has decided to organize a special volume of the journal dedicated solely
to Inverse Problems.

Contributions are invited in both theoretical and numerical topics of
the inverse problems. We expect to publish only papers of high
mathematical quality that contain new results. Survey papers and purely
"engineering" papers are not desirable. In the case when the number of
accepted contributions will exceed the required size of a single issue,
they will be combined to make a multi issue volume. The Guest Editors
for this volume are R. Gilbert, V. Isakov, M.V. Klibanov and M.
Yamamoto. To ensure the high quality of papers, all submission will go
through a usual referee process.

In order to give the contributors ample time to organize their paper we
have set the submission deadline March 1, 2008. Please let us know as
soon as possible whether you intend to submit a paper so we can plan how
many issues this will entail. Doing so will permit us to set up in
advance a user number for you and a password for the journal website.
This will facilitate submission of the paper.

Papers should be submitted on line at the ScholarOne site.

http://mc.manuscriptcentral.com

When logging on to the website authors should indicate on their
submission that the paper is meant to appear in the Inverse Problem
volume. There is a place to indicate this. It would be helpful if the
same time you could send an email indicating you have submitted to the
Inverse Problems issue to the journal editor, Robert Gilbert at
gilbert@math.udel.edu .

Robert Gilbert, Victor isakov, Michael Klibanov, Masahiro Yamamoto

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From: Liz Martin <liz.Martin@iop.org>
Date: 9/19/2007
Subject: Contents list for Inverse Problems, volume 23, issues 4-5

Inverse Problems   August 2007   Volume 23, Issue 4
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Seismic velocity estimation from time migration
M K Cameron, S B Fomel and J A Sethian

Efficient binary reconstruction for non-destructive evaluation using
gammagraphy
Marc Allain and J\'er\^ome Idier

Sampling theorem, bandlimited integral kernels and inverse problems
Kedar Khare

Stopping rules for Landweber-type iteration   Tommy Elfving and Touraj
Nikazad

New type of Kadomtsev--Petviashvili equation with self-consistent
sources and its bilinear B\"acklund transformation   Xing-Biao Hu and
Hong-Yan Wang

On the convergence of the Born series in optical tomography with diffuse
light
Vadim A Markel and John C Schotland

A linear sampling approach to inverse elastic scattering in
piecewise-homogeneous domains
Bojan B Guzina and Andrew I Madyarov

A variational formulation for frame-based inverse problems
Caroline Chaux, Patrick L Combettes, Jean-Christophe Pesquet and
Val\'erie R Wajs

Displacement of artefacts in inverse scattering   Raluca Felea

A direct imaging method using far-field data
Songming Hou, Knut Solna and Hongkai Zhao

Convergence and application of a modified iteratively regularized
Gauss--Newton algorithm
Alexandra Smirnova, Rosemary A Renaut and Taufiquar Khan

Generalized Fourier transform for the Camassa--Holm hierarchy
Adrian Constantin, Vladimir S Gerdjikov and Rossen I Ivanov

On combining model reduction and Gauss--Newton algorithms for inverse
partial differential equation problems
Vladimir Druskin and Mikhail Zaslavsky

Local regularization for n-dimensional integral equations with
applications to image processing
Changjun Cui, Patricia K Lamm and Thomas L Scofield

Krasnoselski--Mann iteration for hierarchical fixed-point problems
Abdellatif Moudafi

Multipole moment decomposition for imaging hydraulic fractures from
remote elastostatic data
B Lecampion and A Peirce

Adaptive finite volume method for distributed non-smooth parameter
identification
Eldad Haber, Stefan Heldmann and Uri Ascher

Stability for the inverse resonance problem for a Jacobi operator with
complex potential
Marco Marletta and Rudi Weikard

On increased stability in the continuation of the Helmholtz equation
Deepak Aralumallige Subbarayappa and Victor Isakov

The Dirichlet-to-Neumann map for the heat equation on a moving boundary
S De Lillo and A S Fokas

Inverse scattering transform for the integrable discrete nonlinear
Schr\"odinger equation with nonvanishing boundary conditions

Mark J Ablowitz, Gino Biondini and Barbara Prinari

Individual articles are free for 30 days following their publication on the web. This issue is available at: http://stacks.iop.org/IP/23/i=4

Inverse nodal problems for Sturm--Liouville equations on graphs
Sonja Currie and Bruce A Watson

A generalized conditional gradient method for nonlinear operator
equations with sparsity constraints
Thomas Bonesky, Kristian Bredies, Dirk A Lorenz and Peter Maass

Grids and transforms for band-limited functions in a disk
Gregory Beylkin, Christopher Kurcz and Lucas Monz\'on

Uniqueness of reconstruction and an inversion procedure for
thermoacoustic and photoacoustic tomography with variable sound speed
Mark Agranovsky and Peter Kuchment

Inverse source problem in an advection--dispersion--reaction system:
application to water pollution
Abdellatif El Badia and Adel Hamdi

A componentwise iterated relative entropy regularization method with
updated prior and regularization parameter
H Rullg{\aa}rd, O \"Oktem and U Skoglund

Approximation error analysis in nonlinear state estimation with an
application to state-space identification
J M J Huttunen and J P Kaipio

Factorization method and irregular inclusions in electrical impedance
tomography
Bastian Gebauer and Nuutti Hyv\"onen

Exact solutions to the focusing nonlinear Schr\"odinger equation
Tuncay Aktosun, Francesco Demontis and Cornelis van der Mee

Tomographic reconstruction of vector fields in variable background media
Alexandru Tamasan

On level set type methods for elliptic Cauchy problems
A Leit\~ao and M Marques Alves

Image reconstruction for a general circle-plus trajectory
A Katsevich

Shrinkage versus deconvolution   E Klann, M Kuhn, D A Lorenz, P Maass
and H Thiele

Fr\'echet derivative with respect to the shape of a strongly convex
nonscattering region in optical tomography
Nuutti Hyv\"onen

Position registration from voltage measurements
Fadil Santosa and Carl Toews

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Fax: +44 (0)117 929 4318    WWW: http://www.iop.org
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Mathematics of Control, Signals, and Systems    2007    Vol. 19, No. 3
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INFORMATION

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

Today's Topics:
     Survey Request from the IPIA (Inverse Problems Int'l Association)
     Concerns about the IPIA (Inverse Problems Int'l Association)
     Int'l Conf. on Inverse Problems, Control and Shape Optimization
     Int'l Congress on Image and Signal Processing
     Int'l Conference on Automatic Differentiation
     SIAM Annual Meeting / SIAM Conference on Imaging Science
     SIAM Conference on Optimization
     Postdoctoral Position in Impedance Tomography in Germany
     Postdoctoral and PhD Positions in Image Processing, etc.
     Tenure-track Position in Math/Stat at Univ. of Maryland, B.C.
     Tenured/Tenure-track Positions in Math at Colorado State Univ.
     Table of Contents: Inverse Problems in Science & 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

Subject: IP_Digest announcement
From: William Rundell <rundell@math.tamu.edu>
Date: Fri, 12 Oct 2007 12:33:45 -0400

Dear Colleagues,

You may be aware that the new society (Inverse Problems International
Association, IPIA) has a web page and is the process of seeking input
as to how best to serve the mathematical inverse problems community.
To this end, we have designed a survey to determine priorities for the
society. This survey can be found from
  http://www.inverse-problems.net/

If you already have registered with IPIA you will be required to login
first at
  http://www.inverse-problems.net/login.php

If you have not yet registered, this is quickly done from
  http://www.inverse-problems.net/register.php

The plan is collect this information solely to decide on which
activities the society should concentrate. We will then use this to
draw up preliminary bye-laws and then hold open elections for the
society's officers.

I encourage you to fill out this form as soon as possible but
certainly by November 1. Please share this information as see fit,
for we would like to obtain maximum participation in the survey.

With best regards

Bill Rundell

(for the IPIA steering committee)

Subject: Concerns about the Inverse Problems International
          Association, IPIA
From: "Klibanov, Michael" <mklibanv@uncc.edu>
Date: Wed, 17 Oct 2007 17:20:47 -0400

Dear Colleagues:

I am interested in the issues raised by the participants of the
organizing meeting of Inverse Problems International Association, IPIA
in Vancouver in June. That meeting was a good first step with several
important issues left unresolved. I am afraid that a rush to elections
and organizational structure without a broader discussion and a clear
mandate from the community might divide rather than unite us.

If you share my concerns, please e-mail me or Bill Rundell

With best regards and warm wishes,
Michael Klibanov

Subject: PICOF'08 Conference
From: el alaoui talibi mohamed <elalaoui@ucam.ac.ma>
Date: Wed, 17 Oct 2007

Dear Colleague,

We are pleased to announce the forthcoming 4th International
Conference on Inverse Problems, Control and Shape Optimization
(PICOF'08) to be held in Marrakech, Morocco on April 16-18, 2008.
Please visit the conference website in progress:
  http://www.ucam.ac.ma/picof08

Best regards.

Mohamed EL ALAOUI TALIBI
DÃƒÂ©partement de MathÃƒÂ©matiques, FacultÃƒÂ© des Sciences Semlalia
Marrakesh- Morocco
e-mail : elalaoui@ucam.ac.ma
Phone: office:212 24434649   Personal: 212 63455807
Fax: 212 24437409

Subject: CISP 2008, Sanya, China: Deadline 10 November
From: bai ye <2006conf@gmail.com>
Date: Thu, 27 Sep 2007

    2008 International Congress on Image and Signal Processing
                        (CISP 2008)

            28 - 30 May 2008, Sanya, Hainan, China

            Submission Deadline: 10 November 2007

             http://www.hainu.edu.cn/CISP2008

        Call for Papers, Invited Sessions & Sponsorship

The aim of CISP 2008 is to bring together researchers working in many
different areas of image and signal processing to foster exchange of
new ideas.

The CISP 2008 proceedings will be published by the IEEE and will be
indexed in both EI and ISTP. Selected good papers will be recommended
for publication in SCI/SCI-E indexed international journals.

CISP 2008 will be co-located with the 2008 International Conference on
BioMedical Engineering and Informatics
(BMEI 2008: http://www.hainu.edu.cn/BMEI2008),
in order to promote cross-fertilization between the broad areas of
biomedical engineering and signal processing.

ABOUT SANYA

Sanya is one of China's premier tourist destinations, with white-sand
beaches, charming scenery, hot-springs, and popular activities such as
scuba-diving and rafting. More than 20 ethnic groups, including Han,
Li, Miao, and Hui, inhabit Sanya and make Sanya a wonderful place to
appreciate the various cultures of China.

For more information, visit the conference web page or email the
secretariat at cisp2008@hainu.edu.cn

Join us at this major event in scenic Hainan !!

Subject: Call for papers, Automatic Differentiation 2008
From: Martin Buecker <buecker@sc.rwth-aachen.de>
Date: Tue, 25 Sep 2007

        AD2008 - Second Call for Papers

Fifth International Conference on Automatic Differentiation
August 11-15, 2008, Bonn, Germany
http://www.autodiff.org/ad08

Automatic differentiation (AD) is a methodology for computing
derivatives of functions given in the form of computer codes.
In addition to recent advances in AD research and software
development, conference topics include the use of AD in areas
such as optimization, ODEs/DAEs, and inverse problems.

Confirmed invited presentations:

Mike Giles (Oxford University)
Wolfgang Marquardt (RWTH Aachen University)
Arnold Neumaier (Vienna University)
Alex Pothen (Old Dominion University)
Eelco Visser (Delft University)

Publication:

Proceedings of all accepted papers will be published in
Springer's Lecture Notes in Computational Science and
Engineering series. The number of pages is limited to 10
in Springer's LaTeX2e style for contributed books.

Schedule:

The conference will start Monday afternoon and finish by noon
on Friday. A social event is planned for Wednesday afternoon.
Bonn is easily accessible within one hour from Frankfurt/Main
International Airport (by train or car). Its picturesque
location on the Rhine River makes it ideal for sightseeing
tours along the Rhine as well as for visits to the nearby
cities of Cologne, Duesseldorf, and Aachen. Details regarding
the location, procedures for registration and submission as
well as the preliminary program will be made available at
http://www.autodiff.org/ad08

Organized by RWTH Aachen University, AD2008 will take place at
Bonn-Aachen International Center for Information Technology
under the direction of an international program committee.

Important dates:

November 30, 2007 : Full papers submission
January 11, 2008 : Notification of acceptance
February 1, 2008 : Camera-ready papers
August 11-15, 2008: Conference

Previous conferences:

1991: Breckenridge, USA
1996: Santa Fe, USA
2000: Nice, France
2004: Chicago, USA

Subject: Please Post: 2008 SIAM Annual Meeting
From: Connie Young <Young@siam.org>
Date: Wed, 26 Sep 2007

Conference Name: 2008 SIAM Annual Meeting (AN08)
    (This meeting is being held jointly with the SIAM Conference on
    Imaging Science)
Location: Town & Country Resort and Convention Center, San Diego, CA
Dates: July 7-11, 2008

Invited Speakers:

Plenary Speakers
Karen Devine, Sandia National Laboratories
Lars EldÃƒÂ©n, LinkÃƒÂ¶ping University, Sweden
Trey G. Ideker, University of California, San Diego
Jon Kleinberg, Cornell University
Jean-Michel Morel*, ENS Cachan, France

*Joint speaker with the 2008 SIAM Conference on Imaging Science (see
 http://www.siam.org/meetings/is08/ for additional information about
 this conference)

Topical Speakers
Rakesh Agrawal, Microsoft Search Labs
John P. Boyd, University of Michigan
Rasmus Bro, Copenhagen University, Denmark
Jack Dongarra, University of Tennessee

G. Bard Ermentrout, University of Pittsburgh
Lise Getoor, University of Maryland, College Park
Randall J. LeVeque, University of Washington
Mark Newman, University of Michigan
Jill P. Mesirov, Broad Institute of MIT and Harvard University
James G. Nagy, Emory University
Steven G. Parker, University of Utah
CÃƒÂ©cile Penland, NOAA/ESRL/Physical Sciences Division
Anders Petersson, Lawrence Livermore National Laboratory
Andrew Tomkins, Yahoo! Research

Special Lectures
SIAM Past President's Address - Martin Golubitsky, University of Houston
AWM-SIAM Sonia Kovalevsky Lecture - Lecturer TBA
I.E. Block Community Lecture - Daniel N. Rockmore, Dartmouth College
W. T. and Idalia Reid Prize in Mathematics - Lecturer TBA
The John von Neumann Lecture - Lecturer TBA

The Call for Presentations is available at:
http://www.siam.org/meetings/an08/

Important Deadlines
SUBMISSION DEADLINES
January 14, 2008: Minisymposium proposals
January 28, 2008: Abstracts for contributed and minisymposium speakers

REGISTRATION DEADLINE
June 9, 2008

HOTEL RESERVATION DEADLINE
June 9, 2008

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

Subject: REMINDER SIAM OP08 Deadline Extension
From: "Nicole C. Jorlett" <Jorlett@siam.org>
Date: Mon, 8 Oct 2007

Conference Name: SIAM Conference on Optimization
Location: Boston, Massachusetts
Dates: May 10 - 13, 2008

SUBMISSION DEADLINES HAVE BEEN EXTENDED

November 8, 2007: Minisymposium proposals
November 8, 2007: Abstracts for contributed and minisymposium speakers

Visit http://www.siam.org/meetings/op08/participation.php to submit.

For more information about the conference, visit
   http://www.siam.org/meetings/op08/
or contact SIAM Conference Department at meetings@siam.org.

Subject: Submission for ipnet
From: Rainer.Kress <kress@math.uni-goettingen.de>
Date: Fri, 21 Sep 2007

The Institut fuer Numerische und Angewandte Mathematik at the
University of Goettinen, Germany, has an immediate opening for a Post
Doc within a BMBF project on "Regularization in electrical impedance
tomography in medicine and geosciences". The GÃƒÂ¶ttingen part of this
project is concerned with boundary integral equation and conformal
mapping techniques in impedance tomography.

The Post Doc position is for two years with the possibility of an
extension for another year. It requires a PhD, preferably in
mathematics.

Applications should send to Professor Rainer Kress at
kress@math.uni-goettingen.de

Professor Rainer Kress
Institut fÃƒÂ¼r 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

Subject: 5 postdocs and 10 phd positions in PDE image processing,
         visualization and level set inverse problem
From: Xue-Cheng Tai <tai@math.uib.no>
Date: Mon, 24 Sep 2007

   Five postdocs and ten phd positions in PDE image processing,
   visualization and level set inverse problem

We are happy to invite application for 5 postdoc and more than 10 phd
positions in the field of PDE image processing, visualization and
level set methods. Some of the position are located at the Mathematics
Department of Bergen, Norway, see
   http://melding.uib.no/doc/Ledige_stillinger/1188997655.html
The other positions are located at the Division of Mathematical
Sciences, Nanyang Technological University of Singapore, see
   http://www.spms.ntu.edu.sg/MAS/Employment/Recruitment.htm

These position are related to a fund to build up build a national
resource to explore new mathematical and computational methods for
PDE-based image processing and analysis, surface processing involving
compression, reconstruction, remeshing and encoding for Interactive
Digital Media development. One of the position is related to use level
set methods for PDE inverse problems.

Please refer to the above webpages for the details about the
applications. Review process will start soon after the
deadline. However, we will continue to accept applications until all
the positions are filled.

Xue-Cheng Tai, Tai@math.uib.no

Subject: position announcement
From: "Thomas I. Seidman" <seidman@math.umbc.edu>
Date: Wed, 3 Oct 2007

DEPARTMENT OF MATHEMATICS AND STATISTICS, UMBC

The Department of Mathematics and Statistics, University of Maryland,
Baltimore County (UMBC) invites applications for a tenure-track faculty
position in Mathematical Sciences at the rank of Assistant Professor,
starting in Fall 2008. The successful candidate should have a PhD in
mathematics or a related field, have an active, independent research
program, strong potential to obtain external funding, and a commitment
to excellence in teaching.

Preference will be given to candidates who are able to conduct
interdisciplinary research with applications in life sciences, as well
as those who are able interact with existing faculty in the department.
Current research areas represented in the department include stochastic
processes, numerical analysis, differential equations, optimization,
mathematical modeling and statistics with applications in biological
and environmental sciences and engineering.

The department faculty has active research and programmatic
collaborations with several research centers in the campus including
JCET (www.umbc.edu/jcet) CUERE (www.umbc.edu/cuere/), CASPR
(www.umbc.edu/caspr/) , and the School of Aging Studies
(www.umbc.edu/erickson/). The department has external grants from a
number of agencies including NIH, EPA, NSA, and NSF and a consulting
center (www.umbc.edu/circ/) which offers services to both on and off
campus researchers. The department possesses excellent computing
facilities including a 32-node distributed-memory cluster with
low-latency interconnect, and UMBC is in the process of developing a
core facility for high-performance computing.

The department offers BS, MS, and PhD degrees in applied mathematics and
in statistics. For more information, see our website at
www.math.umbc.edu.

Applicants should send their vita, a summary of their current research
program, a teaching statement, and also arrange to have three letters of
reference sent to: Search Committee, Department of Mathematics and
Statistics, UMBC, 1000 Hilltop Circle, Baltimore, MD 21250. The
screening of applicants will commence November 1, 2007 and will
continue until the position is filled.

UMBC has an NSF ADVANCE grant to increase the participation and success
of women in science and engineering careers. Applications from
minorities, women, and people with disabilities are especially
encouraged. UMBC is an Affirmative Action/Equal Opportunity Employer.

Submitted by:
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]

Subject: submission for IPNet Digest
From: Jennifer Mueller <jennifer.l.mueller@gmail.com>
Date: Fri, 12 Oct 2007

The Department of Mathematics at Colorado State University invites
applications for five tenured or tenure-track faculty positions with
appointment levels commensurate with experience. Applicants are sought
in any area of mathematics. Colorado State has embarked on an
ambitious plan to build interdisciplinary research and education

across campus. Mathematics has a key role to play and a majority of
these positions are intended for mathematicians with the potential to
initiate and take an active part in multidisciplinary research and
education efforts on campus or with external entities.

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.
Applications postmarked by November 26, 2007 are guaranteed full
consideration. Colorado State University is an EEO/AA employer
(Equal Opportunity Office, 101 Student Services).

A "long version" of the advertisement can be found at
http://www.math.colostate.edu/jobs.shtml#tt

Subject: IPNet submission
From: "Sternberg, Zoe" <Zoe.Sternberg@tandf.co.uk>
Date: Wed, 26 Sep 2007

Inverse Problems in Science and Engineering   2007   Vol. 15, No. 6
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A uniqueness theorem for inverse nodal problem
Hikmet Koyunbakan and Etibar S. Panakhov

The recovery of analytic potentials for fourth-order differential
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Projected Barzilai-Borwein method for large-scale nonnegative image
restoration   Yanfei Wang and Shiqian Ma

Reconstruction of a grounded object in an electrostatic halfspace with
an indicator function   C.Van Berkel and W. R. B. Lionheart

An inversion method for identification of elastoplastic properties for
engineering materials from limited spherical indentation measurements
Alemdar Hasanov

The estimation of parameters for stochastic differential equations
using neural networks
Z. Xie, D. Kulasiri, S. Samarasinghe, and C. Rajanayaka

Vibrational genetic algorithm (VGA) and dynamic mesh in the
optimization of 3D wing geometries
ErgÃƒÂ¼ven Vatandas, Abdurrahman Hacioglu and I.brahim ÃƒÂ–zkol

Inverse Problems in Science and Engineering: Volume 15 Issue 6 is now
available online at http://www.informaworld.com/IPSE

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Identification and design of source term in a two-region heat conduction problem   Paulo M. P. Silva, Helcio R. B. Orlande, Marcelo J. ColaÃfÂ§o, Panayiotis S. Shiakolas, and George S. Dulikravich

Numerical analysis of a calibration problem for simulating electric fault arc tests
T. Hein, B. Hofmanm. A. Meyer, and P. Steinhorst

Application of the generalized extremal optimization algorithm to an inverse radiative transfer problem
F. L. de Sousa, F. J. C. P. Soeiro, A. J. Silva Neto, and
F. M. Ramos

Estimation of thermal resistance distributions for die-attach testing in microelectronics   V. Feuillet, Y. Jarny, and Y. Scudeller

Estimation of a source term in a two-dimensional heat transfer problem: application to an electron beam welding, theoretical and experimental validations
J. Guo, P. Le Masson, S. Rouquette,T. Loulou and E. Artioukhine

Experimental validation of an extended Kalman smoothing technique for solving nonlinear inverse heat conduction problems
N. Daouas and M. -S. Radhouani

Inverse Problems in Science and Engineering: Volume 15 Issue 7 is now available online at http://www.informaworld.com/IPSE

Subject: IPNet submission
From: "Sternberg, Zoe" <Zoe.Sternberg@tandf.co.uk>
Date: Wed, 26 Sep 2007

Linear and Multilinear Algebra   2007   Vol. 55, No. 5
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Radii and subnorms on finite-dimensional power-associative algebras
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The semigroup generated by a unitary orbit of a singular matrix
H. Radjavi and A. R. Sourour

Two generator subalgebras of Lie algebras
Kevin Bowman, David A. Towers, and Vicente R. Varea

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Abraham Berman and Changqing Xu

Maximizing Laplacian spectral radius over trees with fixed diameter
A. K. Lal and K. L. Patra

Zeros of complex homogeneous polynomials
Mary Lillian Lourenço and Neusa Nogas Tocha

On the pivot structure for the weighing matrix W(12,11)
Christos Kravvaritis, Marilena Mitrouli and Jennifer Seberry

On a conjecture about the eigenvalues of doubly stochastic matrices
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Some necessary and some sufficient trace inequalities for Euclidean
distance matrices   A. Y. Alfakih; Henry Wolkowicz

Linear and Multilinear Algebra: Volume 55 Issue 5 is now available
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On Tate's trace
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Matrices that preserve vectors of fixed sign variation
C. R. Johnson and J. M. Peña

Positive and real-positive solutions to the equation axa*=c in
C*-algebras
D. Cvetkovic'-Ilic', Alegra Dajic', and J. J. Koliha

Automorphisms of the standard Borel subalgebra of Lie algebra of Cm
type over a commutative ring
Qiu Yu, Dengyin Wang, and Shikun Ou

An LMI description for the cone of Lorentz-positive maps
Roland Hildebrand

Positive maps of second-order cones   Roland Hildebrand

Additive maps on hermitian matrices M. Orel and B. Kuzma

Lie derivations on triangular matrices   Dominik Benkovi?

Linear and Multilinear Algebra: Volume 55 Issue 6 is now available
online at informaworldTM.

Submitted by: Zoe Sternberg
Publishing Editor, Applied Science Journals, Taylor & Francis
4 Park Square, Milton Park, Abingdon, OX14 4RN, UK
Tel: +44 207 017 4506; Fax: +44 207 017 6714
www.informaworld.com/journals
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Today's Editors:

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

Today's Topics:

    Note from the Editors
    Int' l Conf. on Modeling, Approx. Methods, Ill-Posed Problems
    NSF/CBMS Conference on Imaging in Random Media
    ASME Conf. on Inverse/Optimization Problems in Heat Transfer
    Special Topics on Inverse Problems at ASME IDETC/CIE Conf's
    Symposia on Inverse Parameter Identification at WCCM-ECCOMAS
    Deadline Extended for Int'l Conf. on Engineering Optimization
    Ph.D. Scholarship in Integral Equations and Inverse Problems
    New Positions in Interdisciplinary Geothermal Energy Research
    Research Postdoc in Applied Math at Univ. of Florida
    Abstract for an EEG/MEG-Neuroimaging Technical Report
    Special Issue: Inverse Prob's in Mechanics, Signal Processing
    Table of Contents: Inverse Problems
    Table of Contents: J. of Inverse and Ill-Posed Problems
    Table of Contents: Nonlinear Analysis: Modelling and Control

Submissions for IPNet Digest:

    Mail to ipnet-digest@math.msu.edu

Information about IPNet:

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

Subject: Note from the Editors

Due to server and other difficulties, this issue of the IPNet Digest
is very late in coming out. We apologize for this, and especially for
the fact that some of the conference deadlines mentioned below have,
unfortunately, already passed. This no doubt causes difficulties for
conference organizers but we still hope that there is some room for
flexibility in these deadlines, especially in the case of readers who
are only now learning learning about these conferences and their
deadlines.

-Eds.

Subject: Int' l conf. on modeling, approximate methods and ill-posed
problems
From: Uno Hämarik <uno.hamarik@ut.ee>
Date: Thu, 20 Dec 2007

Conference Name: The 13th International Conference
Mathematical Modelling and Analysis (MMA2008)
and
the Third International Conference on
Approximation Methods and Orthogonal Expansions
(AMOE2008)

The conference is dedicated to 70th birthday of Professor Gennadi
Vainikko
Location: Tartu (Kääriku), Estonia
Dates: June 4 - 7, 2008

The main topics

* Modelling and analysis of problems of
mathematical physics and engineering.

* Approximation Methods for Differential, Integral and Operator
Equations and applications.

* Orthogonal Expansions, Wavelets and Splines.

* Inverse and Ill-Posed Problems.

Confirmed plenary and semi-plenary speakers:
Hermann Brunner(Hong Kong Baptist University, Hong Kong)
Andris Buikis (University of Latvia, Riga, Latvia)
Ivan Graham (University of Bath, Bath, UK)
Zuhair Nashed (University of Central Florida, USA)
Sergei Pereverzyev (RICAM, Austria)
Ian Sloan (University of New South Wales, Sydney, Australia)
Ulrich Tautenhahn (University of Applied Sciences Zittau/Görlitz,
Germany)
Vladimir V. Vasin (Inst. Math. Mechanics, Ekaterinburg, Russia)

Submission deadline for abstracts: March 1, 2008

For more information about conference, visit
http://www.iam.ut.ee/mma-amoe2008/

Subject: Announcement of NSF/CBMS Conference on Imaging
in Random Media at Rice University
From: Liliana Borcea <borcea@caam.rice.edu>
Date: Thu, 6 Dec 2007

Dear Colleagues,

We would like to bring to your attention the Conference on Imaging in
Random Media which we are organizing in the Computational and Applied
Mathematics Department at Rice University, in May 12-16, 2008. This is
an NSF/CBMS Conference in Mathematical Sciences.

The conference format is in the standard NSF/CBMS style. It consists
of ten lectures given by George Papanicolaou, from Stanford university
and extensive discussion sessions led by senior scientists with a
broad view of the imaging science and wave propagation in random
media.

The goal of the conference is to introduce a mathematically oriented
audience to sensor array imaging in randomly fluctuating media. The
lectures will provide a mathematically sound and self-contained
introduction to this emerging field in applied mathematics, with roots
in wave propagation, random media, optimization, numerical analysis
and statistics. The conference is intended to engage a diverse group
of researchers from the academia and industry in this new area of

research and to develop a broad and confident perspective of what is
known and what is worth investigating.

The conference web page is: http://www.caam.rice.edu/~CBMS2008/

With best regards,

Liliana Borcea, Dan Sorensen and Bill Symes.

Submitted by: Liliana Borcea, Noah G. Harding Professor,
Computational & Applied Mathematics, Rice University, MS 134
6100 Main Street, Houston, TX 77005-1892
E-mail : borcea@caam.rice.edu
Telephone: (713) 348-5723
FAX : (713) 348-5318
http://www.caam.rice.edu/~borcea/

Subject: Inverse and Optimization Problems in Heat Transfer
(ASME 2008 Conference)
From: "Daun, Kyle" <Kyle.Daun@nrc-cnrc.gc.ca>
Date: Fri, 2 Nov 2007

2008 ASME Summer Heat Transfer Conference

August 10-14, 2008

Jacksonville, Florida

Call for Papers: Inverse Problems and Optimization in Heat Transfer

Dear Colleagues,

The 2008 ASME combined Heat Transfer, Fluids, Energy, Solar, and Nano
Conference is a unique opportunity to expand international
cooperation, understanding, and to promote multidisciplinary research
in heat transfer. The ASME Heat Transfer Division K-6 and K-20
committees invite authors to participate in the topical area of
Inverse Problems and Optimization in Heat Transfer.

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

- Mathematical aspects and techniques for inverse analysis and
optimization

- Optimal design of heat transfer devices

- Inverse multi-mode heat transfer problems

- Boundary and initial condition reconstruction

- Parameter estimation

- Imaging and tomography

- Remote sensing

- Design of experiments

Submit your 400-word text-only abstract to
http://www.htconference.org/ by December 7, 2007.

We would also be grateful if you could print and prominently post the
graphic call for papers located at
http://me.byu.edu/faculty/matthewjones so other researchers may be
make aware of this opportunity to meet and collaborate.

Sincerely,

Kyle Daun, University of Waterloo, kjdaun@mme.uwaterloo.ca
Matthew Jones, Brigham Young University, mrjones@byu.edu
Keith Woodbury, University of Alabama, woodbury@me.ua.edu
Kevin Dowding, Sandia National Labs, kjdowdi@sandia.gov

Subject: ASME - IDETC and CIE Conferences - Inverse Problems in
Science and Engineering
From: Helcio Rangel Barreto Orlande <helcio@mecanica.coppe.ufrj.br>
Date: Tue, 4 Dec 2007

Call for Papers

Inverse Problems in Science and Engineering

Special Topic Area in the 2008 ASME International Design Engineering
Technical Conferences (IDETC) and Computers and Information in
Engineering Conference (CIE), August 3-6, 2008, New York, NY.

http://www.asmeconferences.org/IDETC08/

Recent advances in laboratory and industry automation methodologies
and practices along with the astonishing progress of computational
technologies have enabled a significant growth of data-driven inverse
methods for system characterization and design.

When it is possible to determine governing equation(s), shape(s) and
size(s) of the domain(s), boundary and initial conditions, material
properties of the media contained in the field, and internal sources
and external forces or inputs, then the analysis determining the
unknown field is considered mathematically well-posed and solvable. If
any of these elements is unknown or unavailable, then the field
problem becomes incompletely defined (ill-posed) and is of an indirect
(or inverse) type. The inverse problems can therefore be classified as
the determination of unknown shapes, boundary/initial values, sources
and forces, material properties, or governing equation(s). If
sufficient amount and type of additional information is provided, the
inverse problems can become sufficiently specified so that with the
use of appropriate algorithms, they can be solved.

The algorithmic methods for the solution of inverse problems could be
grouped into two basic approaches: pure inverse methods and
optimization-based methods. That is, in some methods, sophisticated
regularization formulations are used. In other methods, different
optimization algorithms are used as tools to solve de facto inverse
problems.

ASME's CIE division under the auspices of the Computational Technologies for Engineering Science Applications (CTESA) technical committee, is organizing this year a special topic area that is designed to bring together researchers on Inverse Methods in Science and Engineering and their applications from leading international and interdisciplinary research communities. The conference serves as a forum to present the results of the latest research and product/tool developments, and to highlight related activities from around the world. For more information and abstract submission please visit http://www.asmeconferences.org/IDETC08/

Topics for the papers to be submitted for presentation at this meeting include, but are not restricted to:

Shape design: determination of shapes, sizes and locations of (multiply connected) domains (shape identification in acoustics, aerodynamics, electromagnetics, elasticity, etc; detection of voids and cracks).

Material properties and constitutive responses: determination of physical properties of media.

Boundary values/initial values: identification of the proper boundary conditions and/or initial conditions (tomographic problems involving X-rays, ultrasonics, optics, thermal sources etc; determination of thermal, stress/strain, electromagnetic, fluid flow, etc. boundary conditions on inaccessible boundaries; determination of initial chemical composition, etc.).

Forces and sources: determination of the unknown external forces or inputs acting on a domain (structural dynamic modification and reconstruction) and internal concentrated and distributed sources/sinks (sources of heat, noise, electromagnetic radiation, etc.).

Governing equations: inference of analytic forms of partial and/or integral equations governing the variation of measured field quantities; parameter identification methods.

Papers will be judged based on their scientific quality of innovation and rigor, as well as their application value. Quality papers will be referred to the ASME Journal of Computing and Information Science In Engineering.

For more information contact the topic area organizers:

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John G. Michopoulos, Ph.D.

Senior Scientist/Engineer
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Center of Computational Material Science
Special Projects Group, Code 6390.2
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tel.+1 202.767.2189
e-mail: john.michopoulos@nrl.navy.mil
URL: http://cms.nrl.navy.mil

Ashok V. Kumar, Ph.D.
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Gainesville, FL 32611
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Submission of Abstract and Draft Paper for Review
January 21, 2008

Paper Reviews Completed
March 3, 2008

Author Notification of Acceptance
March 24, 2008

Submission of Copyright Form (1903)
April 1, 2008
Copyright transfer forms are requested upon acceptance of the draft
and prior to the submittal of the final paper. Click here for
details.

Submission of Final Paper

April 28, 2008
In accordance with ASME final paper requirements. Publication in the
conference proceedings is not guaranteed if materials are received
after April 28, 2008.

Submitted by: Helcio R. B. Orlande
Department of Mechanical Engineering, Politécnica/COPPE
Federal University of Rio de Janeiro, UFRJ
Cid. Universitaria, Cx. Postal: 68503
Rio de Janeiro, RJ, 21941-972
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Phone:55-21-2562-8368
Fax: 55-21-2562-8383
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IPDO-2007: http://www.ipdos.org/ipdo2007/
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING:
http://www.tandf.co.uk/journals/titles/17415977.asp
HEAT TRANSFER ENGINEERING:
http://www.tandf.co.uk/journals/titles/014576

Subject: Four Mini-Symposia in WCCM-ECCOMAS 2008
From: Helcio Rangel Barreto Orlande <helcio@mecanica.coppe.ufrj.br>

Date: Tue, 4 Dec 2007

World Congress on Computational Mechanics and IACM-ECCOMAS08
Venice, Italy, June 30 - July 5, 2008

http://www.iacm-eccomascongress2008.org/frontal/Invited2.asp

CALL FOR ONE-PAGE ABSTRACTS
for the following four mini-symposia:

COMPUTATIONAL ELECTRO-MAGNETO-HYDRO-DYNAMICS (EMHD)
http://www.iacm-eccomascongress2008.org/admin/files/fileabstract/a42.pdf

METAMODELS FOR HIGH DIMENSIONALITY RESPONSE SURFACES IN MULTIOBJECTIVE
OPTIMIZATION
http://www.iacm-eccomascongress2008.org/admin/files/fileabstract/a45.pdf

NEW TRENDS FOR EVOLUTIONARY OPTIMIZATION METHODS APPLIED TO
MULTIDISCIPLINARY PROBLEMS
http://www.iacm-eccomascongress2008.org/admin/files/fileabstract/a76.pdf

INVERSE PROBLEMS FOR PARAMETER IDENTIFICATION
http://www.iacm-eccomascongress2008.org/admin/files/fileabstract/a167.pdf

One-page abstracts must be submitted via the website at:
http://www.iacm-eccomascongress2008.org/frontal/Submision.asp

December 15, 2007: Deadline for submitting a one page abstract.

January 31, 2008: Acceptance and instructions for writing the
final one page abstract.

February 28, 2008: Deadline for submitting the final abstract and
early payment.

Submitted by: Helcio R. B. Orlande
Department of Mechanical Engineering, Politécnica/COPPE
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Cid. Universitaria, Cx. Postal: 68503
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IPDO-2007: http://www.ipdos.org/ipdo2007/
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING:
http://www.tandf.co.uk/journals/titles/17415977.asp
HEAT TRANSFER ENGINEERING:
http://www.tandf.co.uk/journals/titles/014576

Subject: DEADLINE EXTENDED: EngOpt 2008 - Rio de Janeiro
From: Jose Herskovits <herskovits@mecanica.coppe.ufrj.br>
Date: Mon, 17 Dec 2007

EngOpt 2008 - International Conference on Engineering Optimization.
Rio de Janeiro, Brazil, June 1-5, 2008.
http://www.engopt.org

Dear Colleague,

Following the many requests coming from colleagues willing to
participate in the EngOpt 2008 Conference, the Organizing Committee
has decided to postpone the DEADLINE FOR SHORT ABSTRACTS SUBMISSION to:

JANUARY 15th 2008

The short abstracts will be included in the proceedings book of the
conference (Up to 300 words, written in plain text, without
mathematical formulas)

All abstracts must be submitted through the Conference website:
www.engopt.org

If you have not yet done it, you are kindly requested to submit as
soon as possible your abstract.

Up to now, about 450 abstracts have been submitted to EngOpt
2008. These are in the review process and the result for each paper
will be communicated to the authors as soon as a decision is taken, no
later than the 15th January 2008.

I am looking forward to seeing you in Rio de Janeiro for EngOpt 2008.

With my best wishes,

Prof. Jose Herskovits Norman
OptimizE - Engineering Optimization Lab
Mechanical Engineering Program
COPPE
Federal University of Rio de Janeiro
www.optimize.ufrj.br

Chairman of EngOpt 2008 - www.engopt.org
International Conference of Engineering Optimization
Rio de Janeiro, 2-5 June 2008

Subject: Submission
From: Rainer.Kress <kress@math.uni-goettingen.de>
Date: Wed, 31 Oct 2007

The graduate program "Identification in Mathematical Models: Synergy
of Stochastic and Numerical Methods" at University of Goettingen,
Germany, has immediate openings for a number of PhD scholarships. One
of these openings is within my research group on "Integral Equations
and Inverse Problems". For details I refer to

http://www.num.math.uni-goettingen.de/gk/en/

for the graduate program and

http://www.num.math.uni-goettingen.de/kress/research.html

for my research group.

Inquiries and applications should send to Professor Rainer Kress at
kress@math.uni-goettingen.de

Professor Rainer Kress
Institut fuer 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

Subject: Research positions at RWTH Aachen University
From: Volker Rath <v.rath@geophysik.rwth-aachen.de>
Date: Wed, 14 Nov 2007

At RWTH Aachen University, we are looking for at least 3 highly
motivated scientists to work in an interdisciplinary project aiming at
the improvement of exploration, development, and exploitation
strategies for geothermal reservoirs, as well as for the simulation of
CO_2 sequestration related processes. For this purpose, numerical
software is developed in the following areas:

(1) multiphase flow and phase change
(2) treatment of nonlinearities in a coupled multi-physics simulator
(3) deterministic and stochastic inverse techniques
(4) uncertainty quantification and sensitivity analysis
(5) parallel computing and automatic differentiation
(6) virtual reality

We are looking for holders of a degree in geophysics, physics,
mathematics, computer science, or a related field. Proven
programming capabilities (preferably Fortran9X) are required, as well as
excellent communication skills, and the ability to work efficiently in a
team. Geoscientific knowledge is a plus, though not absolutely necessary.

The work is part of a larger research initiative involving partners
from RWTH Aachen University, FU Berlin University, Kiel University,
and industrial partners. At RWTH Aachen University, the work is carried
out in close cooperation among the following institutes:

* Applied Geophysics and Geothermal Energy
E.ON Energy Research Center
http://www.geophysik.rwth-aachen.de
Department of Geosciences

* Scientific Computing
http://www.sc.rwth-aachen.de
Department of Computer Science

* Center for Computational Engineering Science
http://www.mathcces.rwth-aachen.de
Department of Mathematics

This university is heavily investing in computational science, with
new degree programs in that area as well as the innovative AICES
graduate school (www.aices.rwth-aachen.de) which is funded within the
framework of the German Excellence Initiative.

The position is open as of January 1, 2008 for an initial contract of a
year with the possibility of extension for another two years and will
be paid according to the TV-L pay scale with E13 or better depending on
qualification. Applications for PhD and Postdocs are welcome. Further
inquiries or applications should be directed to:

Volker Rath
Email: v.rath(_AT_)geophysik.rwth-aachen.de)
Tel: +49(0)241 8094836
Skype: volker_rath

or

Martin Buecker
Email: buecker(_AT_)sc.rwth-aachen.de
Tel: +49(0)241 8024919

or in hardcopy to

Applied Geophysics and Geothermal Energy
E.ON Energy Research Center
RWTH Aachen University
Lochnerstr. 4-20
D-52056 Aachen

Submitted by: Dr. Volker Rath, Applied Geophysics, RWTH Aachen University
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URL: http://www-users.rwth-aachen.de/volker.rath
Skype: volker_rath

Subject: Research Assistant Professorship at Uniiversity of Florida
From: Bernard Mair <pbmair@ufl.edu>
Date: Fri, 30 Nov 2007

UNIVERSITY OF FLORIDA, MATHEMATICS DEPARTMENT,
GAINESVILLE, FL 32611-8105

Applications are invited for the

Thompson-Chandler Research Assistant Professorship

in Applied Mathematics for an appointment beginning
in Fall 2008 with a salary of $55,000 plus fringe for
the academic year 2008-09. It is expected that the
position will be renewed for two additional years.
There is a reduced teaching load of 2+1 courses over
two semesters during each of the three academic years
of appointment.

Eligibility: Applied Mathematics PhDs who have received
their degrees in the year 2005 or later.

Outstanding candidates in all areas of applied mathematics
are encouraged to apply. Candidates must send vita and list
of publications and should arrange for three letters of
recommendation to be sent directly to:

Chair of Post-doc Search Committee
Department of Mathematics
University of Florida
Gainesville, FL 32611-8105

Application Deadline: January 7, 2008. Reference # 00021508

The department welcomes applications from women and
minority candidates. The University of Florida is an
EEO/AA institution. For more information about the
position or institution see http://www.math.ufl.edu

Submitted by:
Bernard A. Mair, Ph.D. <> Department of Mathematics
Professor <> University of Florida
302 Little Hall <> P.O. Box 118105
Ph: 352-392-0281 x 291 <> Gainesville, FL 32611-8105
FAX: 352-392-8357 <> USA

Subject: EEG/MEG-neuroimaging technical report: eLORETA
From: "Roberto D. Pascual-Marqui" <pascualm@key.uzh.ch>
Date: Sat, 27 Oct 2007

Dear Colleagues,

A technical report with some results in the field of
EEG/MEG-neuroimaging (including eLORETA) can be downloaded from:
http://arxiv.org/abs/0710.3341
Title and abstract are included below.
I hope by mid-November-2007 to have the software available (free,
academic, public domain, as usual).
Feedback would be greatly appreciated!

Cordially,
Roberto
--
R.D. Pascual-Marqui
The KEY Institute for Brain-Mind Research
University Hospital of Psychiatry
pascualm@key.uzh.ch
www.keyinst.uzh.ch/loreta

****

Discrete, 3D distributed, linear imaging methods of electric neuronal
activity. Part 1: exact, zero error localization

Abstract: This paper deals with the EEG/MEG neuroimaging problem:
given measurements of scalp electric potential differences (EEG:
electroencephalogram) and extracranial magnetic fields (MEG:
magnetoencephalogram), find the 3D distribution of the generating
electric neuronal activity. This problem has no unique solution. Only
particular solutions with "good" localization properties are of
interest, since neuroimaging is concerned with the localization of
brain function. In this paper, a general family of linear imaging
methods with exact, zero error localization to point-test sources is
presented. One particular member of this family is sLORETA. It is
shown here that sLORETA has no localization bias in the presence of
measurement and biological noise. Another member of this family,
denoted as eLORETA (exact low resolution brain electromagnetic
tomography), is a genuine inverse solution (not merely a linear
imaging method) with exact, zero error localization in the presence of
measurement and structured biological noise. The general family of

imaging methods is further extended to include data-dependent
(adaptive) quasi-linear imaging methods, also with the exact, zero
error localization property.

Subject: Special Issue on "Inverse Problems in Mechanical Systems and
Signal Processing".
From: Vadim Sokolov <sokolov@math.niu.edu>
Date: Wed, 31 Oct 2007

Special Issue on "Inverse Problems in Mechanical Systems and Signal
Processing".

The Journal "Mechanical Systems and Signal Processing" will publish a
special issue on the subject of

"Inverse Problems in Mechanical Systems and Signal Processing".

The topics include
Active Vibration Control
Finite Element Model Updating
Damage Detection and Health Monitoring in Structures
Mechanical Signal Processing

The papers can be sent to any of the two editors :
Biswa Nath Datta
Department of Mathematical Sciences
Northern Illinois University
De Kalb, Illinois 60115 USA
E-mail : dattab@math.niu.edu

John E. Mottershead
Department of Mechanical Engineering
University of Liverpool
Liverpool, L69 3GH, UK.
E-mail : J.E.Mottershead@liverpool.ac.uk

According to the journal regulations, all papers will be peer reviewed.
The papers can be either a technical paper or a state-of-the-art review
paper.

The deadline for paper submission is : February 29, 2008

The authors wishing to contribute to this special issue are
encouraged to contact the editors about the details.

Subject: Contents list for Inverse Problems, volume 23, issue 6,
December 2007
From: Laura Smith <Laura.Smith@iop.org>
Date: Mon, 26 Nov 2007

Inverse Problems December 2007 Volume 23, Issue 6
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SPECIAL SECTION ON PHOTO- AND THERMO-ACOUSTIC IMAGING
Guest Editors' introduction
Sarah K Patch and Otmar Scherzer

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Application of inverse source concepts to photoacoustic tomography
Mark A Anastasio, Jin Zhang, Dimple Modgil and Patrick J La Rivi\`ere

The spherical mean value operator with centers on a sphere
David Finch and Rakesh

Fourier reconstruction in optoacoustic imaging using truncated
regularized inverse {\it k -space interpolation}
Michael Jaeger, Simon Sch\"upbach, Andreas Gertsch, Michael Kitz and
Martin Frenz

Temporal back-projection algorithms for photoacoustic tomography with
integrating line detectors
P Burgholzer, J Bauer-Marschallinger, H Gr\"un, M Haltmeier and
G Paltauf

Experimental evaluation of reconstruction algorithms for limited view
photoacoustic tomography with line detectors
G Paltauf, R Nuster, M Haltmeier and P Burgholzer

Photoacoustic tomography with a limited-aperture planar sensor and a
reverberant cavity B T Cox, S R Arridge and P C Beard

Effects of wavelength-dependent fluence attenuation on the noninvasive
photoacoustic imaging of hemoglobin oxygen saturation in subcutaneous
vasculature {\it in vivo}
Konstantin Maslov, Hao F Zhang and Lihong V Wang

PAPERS

On the construction of an absorptive--dispersive medium model via
direct linear inversion of reflected seismic primaries
Kristopher A Innanen and Arthur B Weglein

Numerical reconstruction of a cluster of small elastic inclusions
Hyeonbae Kang, Eunjoo Kim and June-Yub Lee

Adjoint-weighted variational formulation for a direct computational
solution of an inverse heat conduction problem
Paul E Barbone, Assad A Oberai and Isaac Harari

A new approach to hyperbolic inverse problems II: global step
G Eskin

Reflection principle for the Maxwell equations and its application to
inverse electromagnetic scattering
Hongyu Liu, Masahiro Yamamoto and Jun Zou

Inverse spectral results for Schr\"odinger operators on the unit
interval with potentials in L^{p} spaces L Amour and T Raoux

A projection-based level-set approach to enhance conductivity anomaly
reconstruction in electrical resistance tomography
M K Ben Hadj Miled and E L Miller

A numerical method for a Cauchy problem for elliptic partial
differential equations
Weimin Han, Jianguo Huang, Kamran Kazmi and Yu Chen

On some inverse spectral problems related to the Ambarzumyan problem
and the dual string of the string equation Chao-Liang Shen

The output least-squares approach to estimating Lam\'e moduli
Mark S Gockenbach

Isospectral sets and inverse problems for vector-valued
Sturm--Liouville equations Chung-Tsun Shieh

Convergence rate for the Bayesian approach to linear inverse problems
Andreas Hofinger and Hanna K Pikkarainen

Generalization of the dual variational data assimilation algorithm to
a nonlinear layered quasi-geostrophic ocean model Didier Auroux

Domain decomposition methods for linear inverse problems with sparsity
constraints Massimo Fornasier

Experimental validation of a transport-based imaging method in highly
scattering environments
Guillaume Bal, Lawrence Carin, Dehong Liu and Kui Ren

On the complementarity of electroencephalography and
magnetoencephalography G Dassios, A S Fokas and D Hadjiloizi

Conductivity imaging with a single measurement of boundary and
interior data
Adrian Nachman, Alexandru Tamasan and Alexandre Timonov

Inverse spectral problems for 2{\it m} -dimensional canonical Dirac
operators Chuan-Fu Yang and Zhen-You Huang

The expectation-maximization algorithm for ill-posed integral
equations: a convergence analysis
Elena Resmerita, Heinz W Engl and Alfredo N Iusem

Cortical mapping by Laplace--Cauchy transmission using a boundary
element method Maureen Clerc and Jan Kybic

Slice-by-slice reconstruction algorithm for vector tomography with
incomplete data Vladimir Sharafutdinov

Conference announcement

Individual articles are free for 30 days following their publication
on the web. This issue is available at:
http://stacks.iop.org/IP/23/i=6

Submitted by: Laura A Smith, Production Editor, Inverse Problems
E-mail: laura.smith@iop.org

Subject: Table of contents for Journal of Inverse and Ill-Posed
Problems
From: Sergey Kabanikhin <ksi52@mail.ru>
Date: Wed, 7 Nov 2007 03:49:23 -0500

Journal of Inverse and Ill-Posed Problems 2007 Vol. 15, No. 5

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Identification problems for parabolic delay differential equations
with measurement on the boundary Di Blasio G., Lorenzi A.

Inversion of the scalar and vector attenuated X-ray transforms in a
unit disc Kazantsev S.G., Bukhgeim A.A.

Submitted by: Sergey Kabanikhin, Dr. Sc., Professor,
Managing Editor of the Journal of Inverse and Ill-Posed Problems.
E-mail: kabanikh@math.nsc.ru
URL: http://www.math.nsc.ru/LBRT/u2/kabanikhin.html

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