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IPNet Digest Volume 10, Number 01 January 30, 2003

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

Today's Topics:
Int'l Symposium on Inverse Problems in Engineering Mechanics
Conference on Biomedical Applications of Electrical Impedance
PIMS Workshop on Inverse Problems and Medical Imaging
PIMS Workshop on Geophysical Inversion
Workshop on Numerical Linear Algebra
ICIAM 03 Travel Grants through SIAM
Table of Contents: Mathematics of Control, Signals, and Systems
Table of Contents: Linear Algebra and Its Applications

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

Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Masataka Tanaka <dtanaka@gipwc.shinshu-u.ac.jp>
Subject: Int'l Symposium: Inverse Problems in Engineering Mechanics
Date: Tue, 31 Dec 2002

RE: ISIP2003 - International Symposium on Inverse Problems in Engineering Mechanics, 18-21 February 2003, Nagano/Japan

Dear Colleagues,

With my great pleasure I wish to inform you that a provisional program of the above international symposium ISIP2003 is now available and uploaded at the URL:

http://homer.shinshu-u.ac.jp/ISIP2003/

For the four conference days the symposium will be managed with two parallel sessions. Many interesting papers will be presented from the mathematical basis to the frontier in applications of inverse analysis. As the chair person of this symposium, I would like to welcome you to participate and join us for fruitful discussion to make some breakthrough of research on the inverse problems. You can pre-register through the web page of the symposium no later than January 15, 2003 with a reduced registration fee. I am looking forward to seeing you at the ISIP2003.

With best wishes for the coming new Year 2003,

Yours sincerely,
Masa. Tanaka
Chair of the ISIP2003, on behalf of the Symposium Organizing Committee
Nagano: December 31, 2003

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dtanaka@gipwc.shinshu-u.ac.jp

From: Bill Lionheart <Bill.Lionheart@umist.ac.uk>
Subject: 4th Conference on Biomedical Applications of Electrical Impedance
Date: Wed, 22 Jan 2003

4th Conference on Biomedical Applications of Electrical Impedance Tomography

UMIST, Manchester April 23-25 2003.

http://www.eit.org.uk

CALL FOR ABSTRACTS

This year the annual EIT meeting will be held at the University of Manchester Institute of Science and Technology, Manchester (UMIST), UK. As usual the themes of the meeting will be

CLINICAL APPLICATIONS OF EIT
SYSTEM DESIGN
RECONSTRUCTION ALGORITHMS

We also welcome contributions from the GEOPHYSICAL, INDUSTRIAL PROCESS MONITORING and NONDESTRUCTIVE TESTING communities using similar electromagnetic techniques. In this way we aim to encourage interdisciplinary collaboration. As usual EIT will be interpreted in a broad sense and includes techniques using inductive or capacitive coupling to measure electromagnetic properties in the interior of objects.

Please submit abstracts by email to abstracts@eit.org.uk. The abstract should be in ASCII text or if mathematical symbols are required in LaTeX, and should consist of TITLE, AUTHORS, INSTITUTION, followed by an abstract of no more than 300 words. The deadline for abstracts is Friday 28th February. We would prefer brief abstracts on time than detailed ones late.

The conference registration web site will be at
http://www.meeting.co.uk/eit
The conference fee of £85 includes lunch, coffee and the conference outing. We will eat in local restaurants, and budget accommodation is available. In contrast to previous years this meeting has no support so there are no reduced rates for postgraduate students. For registration queries contact Janet Adnams <janet.adnams@umist.ac.uk> at Manchester Conference Centre.

It has been suggested that we hold an EIDORS master class, focusing on forward modelling and reconstruction in three dimensions on the day prior to the meeting -- April 22nd. Please indicate to Bill Lionheart bill.lionheart@umist.ac.uk if you are interested in such an event. If there is sufficient interest we will run it.

We look forward to seeing you in Manchester

Bill Lionheart, Richard Bayford
Conference organizers

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: PIMS Workshop on Inverse Problems and Medical Imaging
Date: Wed, 29 Jan 2003

The PIMS Workshop on "Inverse Problems and Medical Imaging" will be held August 4-8, 2003 at the Pacific Institute of Mathematical Sciences (PIMS) site at the University of British Columbia, Vancouver, Canada. This is one of the workshops of the 2003 thematic program on inverse problems sponsored by PIMS.

The URL for the workshop is: http://www.pims.math.ca/inverse

Please contact John Schotland (johns@seas.upenn.edu) or Gunther Uhlmann (gunther@math.washington.edu) for any additional information.

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: PIMS Workshop on Geophysical Inversion
Date: Wed, 29 Jan 2003

A "Geophysical Inversion Workshop" will be held July 20-25, 2003 at the Pacific Institute of Mathematical Sciences (PIMS) site at the University of Calgary, Canada. This is one of the workshops of the 2003 thematic program on inverse problems sponsored by PIMS.

The URL for the workshop is: http://www.pims.math.ca/inverse

Please contact Gary Margrave (gary@geo.ucalgary.ca) or Gunther Uhlmann (gunther@math.washington.edu) for any additional information.

From: Lothar Reichel <reichel@mcs.kent.edu>
Subject: Workshop on Numerical Linear Algebra
Date: Sun, 26 Jan 2003

The workshop "Recent Trends in Numerical Linear Algeba" will be held at the University Carlos III in Leganes outside Madrid, Spain, June 16-17, 2003. The speakers include

* Dario Bini. Universita di Pisa. Italy.
* Daniela Calvetti. Case Western Reserve University. USA.
* Raymond Chan. Chinese University Hong Kong. China.
* Gene Golub. Stanford University. USA.
* William Gragg. Naval Postgraduate School Monterey. USA
* Franklin Luk. Rensselaer Polytechnic Institute. USA.
* Froilan Martinez Dopico. Universidad Carlos III de Madrid. Spain.
* Michael Ng. University of Hong Kong. China.
* Vadim Olshevsky. University of Connecticut. USA.
* Lothar Reichel. Kent State University. USA.
* Qiang Ye. University of Kentucky. USA.

Further information can be found at the web site:

http://www.uc3m.es/uc3m/dpto/MATEM/investigacion/congresoalgebra.html

If you are interested in participating in the workshop, please fill out the registration form at the above web site as soon as possible,

and no later than May 31. For further information about the workshop please contact F. Marcellan by e-mail: pacomarc@ing.uc3m.es

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From: michelle montgomery <montgomery@siam.org>
Subject: ICIAM 03 Travel Grants through SIAM
Date: Mon, 27 Jan 2003

SIAM announces the availability of ICIAM 03 travel grants. Guidelines for who may apply, selection criteria, and the application can be found at http://www.siam.org/meetings/coopconf/iciamapp.pdf.

Program information for ICIAM 03 can be found at http://www.austms.org.au/iciam2003/.

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From: magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Fri, 10 Jan 2003

Mathematics of Control, Signals, and Systems 2002 Vol. 15, No. 4
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Observability and forward-backward observability of discrete-time nonlinear systems F. Albertini and D. D'Alessandro

Passive and conservative continuous-time impedance and scattering systems. Part I: Well-posed systems O.J. Staffans

Robustness of nonlinear delay equations with respect to input perturbations: A trajectory based approach
L. Moreau, W. Michiels, D. Aeyels and D. Roose

A trajectory based approach for stability robustness of nonlinear systems with inputs D. Angeli and D. Ne?ic

Properties of realization of inner functions B. Jacob and H. Zwart

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

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

Address for submissions by email or regular mail:
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The Netherlands
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Eduardo Sontag and Jan van Schuppen (Editors)

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

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Fri, 27 Dec 2002

Linear Algebra and its Applications March 2003 Vol. 361

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The Ninth Conference of the International Linear Algebra Society,
Haifa, Israel 2001
Special editors: A.Berman, L.Elsner, M.Goldberg, R.Loewy.

A characterization of the Euclidean space M. Zippin

An upper bound on the Perron value of an almost regular tournament matrix S. Kirkland

Report on the educational activities during the 9th ILAS Conference at Haifa, June 2001 Tommy Dreyfus, Ted Eisenberg and Frank Uhlig

The adventures of a simple algorithm Achiya Dax

Properties of the Brualdi-Li tournament matrix
Rohan Hemasinha, James R. Weaver, Stephen J. Kirkland and
Jeffrey L. Stuart

Majorization-constrained doubly stochastic matrices
Richard A. Brualdi and Geir Dahl

Two applications of the theory of primary matrix functions
Roger A. Horn and Gregory G. Piepmeyer

Outer inverses: Jacobi type identities and nullities of submatrices
R. B. Bapat

Set-systems with signed solutions Bryan L. Shader

Applying numerical linear algebra techniques to analyzing algorithms in signal processing
J. R. Bunch, R. C. Le Borne and I. K. Proudler

A new unified, balanced, and conceptual approach to teaching linear algebra Frank Uhlig

Hua's fundamental theorems of the geometry of matrices and related results Peter Emrl

Miniversal deformations of marked matrices
Albert Compta, Josep Ferrer and Ferran Puerta

Complexity of matrix problems
Genrich R. Belitskii and Vladimir V. Sergeichuk

Parameterization by polytopes of intersections of orbits by conjugation R. S. Leite and C. Tomei

2-widths of the Holder unit balls
Rosa Amelia Martins and Joao Filipe Queiro

On the Perron roots of principal submatrices of co-order one of irreducible nonnegative matrices S. V. Savchenko

This volume is now available on ScienceDirect
http://www.sciencedirect.com/science and at the Elsevier site for LAA:
http://www.elsevier.com/locate/jnlnr/07738 .

Submitted by: Hans Schneider
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University of Wisconsin
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Office Phone: 608-262-1402
------- end -------

IPNet Digest Volume 10, Number 02 February 27, 2003

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

Today's Topics:
Int'l Symposium on Inverse Problems in Engineering Mechanics
IPES 2003: Inverse Problems in Engineering Symposium
CHT04: Advances in Computational Heat Transfer
Conference in Honor of Raphy Coifman and Yves Meyer
Position: Interdisciplinary Computational Scientist/Engineer
Table of Contents: Inverse Problems
Table of Contents: Linear Algebra and Its Applications

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From: kwoodbury@me.ua.edu
Subject: IPES 2003
Date: Fri, 31 Jan 2003

IPES 2003
Inverse Problems in Engineering Symposium
June 9-10, 2003
Bryant Conference Center
The University of Alabama
Tuscaloosa, AL

http://www.me.ua.edu/inverse2003

SPONSORED BY: College of Engineering, University of Alabama
and Department of Mechanical Engineering

Honorary Chair: James V. Beck, Professor emeritus, Michigan State University
Chairman: Keith A. Woodbury, The University of Alabama
Co-chairman: Diego Murio, University of Cincinnati

About the Symposium
This is the twelfth in a series of informal meetings on inverse problems which originated at Michigan State University in 1988. Informal presentations and thorough discussions are the focus of the series.

Call for Papers
Papers are solicited from all areas involving inverse methods and their applications. Four broad categories are being used to organize sessions. These categories and possible sub-topics are:

1. Mathematical Aspects of Inverse Problems - inverse theory and methods, uniqueness and stability considerations, Volterra and other integral equations
2. Inverse Problems in Heat Transfer - inverse heat conduction,

inverse Stefan problem, thermal property estimation
3. Inverse Problems in Mechanics - applications in dynamics, petroleum engineering, shape optimization, contact problems, control of fluid flow
4. Other Inverse Problems - bio-engineering inverse problems, inverse scattering and tomography, etc.

General Information
The two-day symposium will be held at the Bryant Conference Center at The University of Alabama in Tuscaloosa. A registration fee of $100 advance/$125 onsite covers continental breakfast and lunch on both days as well as refreshments during morning and afternoon breaks. Each registered participant will receive a CD-ROM with information provided by each presenter.

As a bonus, we plan to offer a tutorial session on the afternoon of Sunday, June 8. This tutorial will be free to all registered participants, and will be held on the campus of the University of Alabama.

Travel Information
The nearest major airport is in Birmingham, approximately 60 miles away. Car rentals and airport shuttle services are available at the airport. Additionally, we plan to offer a limited van service from the airport to the conference center for conference participants.

Hotel Information
Two hotels are convenient for the conference. The Sheraton Four Points Hotel is immediately adjacent to the Bryant Conference Center and has full hotel amenities. The Four Points is sold out for the night of June 7 due to a special event, but has availability for King/Double room for $85+tax. The Hampton Inn is about 1.5 miles from the Bryant Conference Center, and presently has availability for the nights of June 7-9 at the University rate of $75/night (contact: Joey Mitchell - Front Office Manager).

Four Points by Sheraton Tuscaloosa Capstone
320 Paul Bryant Blvd.
Tuscaloosa, Alabama 35401
Phone (205) 752-3200
Fax (205) 759-9314

Hampton Inn Tuscaloosa-University
600 Harper Lee Drive
Tuscaloosa, AL 35404
Phone (205) 553-9800
Fax (205) 553-0082

Registration
Advance registrations will be accepted until May 15, 2003 at a cost of $100 per participant. After May 15, 2003, a registration fee of $125 is required. Payment must be made by check (sorry, no credit cards). Purchase orders will be accepted, but invoices will be sent upon receipt of registration and payment is expected in advance of the symposium. Refunds will be given only for cancellations prior to May 15, 2003.

For more information
If you are interested in participating in this symposium, please contact the chairman to receive registration material. If you would

like to submit a paper, please submit a tentative title and an abstract by March 15, 2003. Send titles and abstracts or other inquiries to:

Keith A Woodbury
Department of Mechanical Engineering
The University of Alabama
Box 870276
Tuscaloosa, AL 35487-0276
Phone: (205) 348-1647
Email: woodbury@me.ua.edu

From: "G.de Vahl Davis" <cht04@cfd.mech.unsw.edu.au>
Subject: CHT04 symposium
Date: Fri, 21 Feb 2003

ICHMT Symposium CHT-04 Advances in Computational Heat Transfer
Norwegian Coastal Voyage April 19-24,2004

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
Email: cht04@cfd.mech.unsw.edu.au
http://cht04.mech.unsw.edu.au/

From: Stephane Jaffard <jaffard@univ-paris12.fr>
Subject: Coifman-Meyer Conference
Date: Mon, 17 Feb 2003

We (Pascal Auscher, Aline Bonami, Albert Cohen, Guy David, Stephane Jaffard, Fabrice Planchon) are pleased to announce that a conference in honor of Raphy Coifman and Yves Meyer will take place in Orsay between the 18th and the 21st of June 2003.

The first informations are available at

http://www.math.u-psud.fr/~CM2003

Registration is performed on line at the same address. For any problem, contact cm2003@math.u-psud.fr

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From: Linda Potoski <lrpotoski@ucdavis.edu>
Subject: Interdisciplinary Computational Scientist or Engineer
Date: Thu, 13 Feb 2003

Interdisciplinary Computational Scientist or Engineer/Center for Computational Science and Engineering/University of California, Davis.

The Center invites applications from outstanding candidates for the first of several faculty positions. The unifying theme for the Center is the study of complex systems through numerical simulation, the development of new computational methodologies and algorithms, data

mining, and visualization. Preference will be given to candidates at the rank of Professor, although qualified candidates at all levels are encouraged to apply.

Duties include graduate and undergraduate teaching, in addition to a vigorous research program. For additional details please refer to the web site http://naniloa.ucdavis.edu/CSE/. The position will remain open until filled, but to assure full consideration, complete application materials must be received by April 15, 2003. UC Davis is an affirmative action/equal opportunity employer.

LINDA R. POTOSKI
Center Manager
Center for Computational Science and Engineering
c/o Department of Physics
University of California
One Shields Avenue
Davis, CA 95616-8677

(530) 754-4405
(530) 754-4885 (FAX)

From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents list for Inverse Problems, volume 19, issue 1, 2/2003
Date: Fri, 31 Jan 2003

Inverse Problems February 2003 Volume 19, Issue 1

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

PAPERS

Tikhonov regularization and {\it a posteriori} rules for solving nonlinear ill-posed problems
U Tautenhahn and Q-n Jin

A recursive algorithm for the approximate solution of Volterra integral equations of the first kind of convolution type
F Fagnani and L Pandolfi

Inverse boundary value problems and the Aharonov--Bohm effect
G Eskin

A new method for reconstructing electromagnetic inhomogeneities of small volume H Ammari and H Kang

Smooth objective functionals for seismic velocity inversion
C C Stolk and W W Symes

Calibration of the local volatility in a trinomial tree using Tikhonov regularization S Cr\'epey

Prolongation algebras and Hamiltonian operators for peakon equations
A N W Hone and J P Wang

Self-regularization of projection methods with a posteriori discretization level choice for severely ill-posed problems
G Bruckner and S V Pereverzev

Determination of a coefficient in an acoustic equation with a single measurement O Yu Imanuvilov and M Yamamoto

Microlocal structure of inverse synthetic aperture radar data
M Cheney and B Borden

Variable-smoothing local regularization methods for first-kind integral equations P K Lamm

Inverse eigenproblem of anti-symmetric and persymmetric matrices and its approximation D Xie and Y Sheng

Far field mapping for small sound soft obstacles E Jalade

Inverse spectral problem for the Sturm--Liouville equation
B M Brown, V S Samko, I W Knowles and M Marletta

All articles are free for 30 days after publication on the web. This issue is available at: http://stacks.iop.org/0266-5611/19/i=1

Submitted by: Elizabeth Martin, Senior Production Editor
Inverse Problems
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Dirac House, Temple Back,
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E-mail: liz.martin@iop.org WWW: http://www.iop.org

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Sat, 1 Feb 2003

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Chain addition cycles Jody M. Lockhart and William P. Wardlaw

On the limit products of a family of matrices
N. Guglielmi and M. Zennaro

Five-diagonal matrices and zeros of orthogonal polynomials on the unit circle M. J. Cantero, L. Moral and L. Velazquez

Facial structures for unital positive linear maps in the two-dimensional matrix algebra Seung-Hyeok Kye

On trees with perfect matchings
Jason J. Molitierno and Michael Neumann

Reducible pattern k-potent ray pattern matrices Jeffrey Stuart

Relationship of eigenvalues for USAOR iterative method applied to a class of p-cyclic matrices Ruiming Li

The Laplacian eigenvalues of mixed graphs Xiao-Dong Zhang and Rong Luo

The limit points of Laplacian spectra of graphs Ji-Ming Guo

The intersection of the similarity and conjunctivity equivalence classes Mark A. Mills

Moore-Penrose biorthogonal systems in Euclidean spaces
Miroslav Fiedler

Additive rank-one preserving surjections on symmetric matrix spaces
Chong-guang Cao and Xian Zhang

A companion matrix resultant for Bernstein polynomials
Joab R. Winkler

Spectrally stable matrices Terry Lenker and Sivaram Narayan

On the construction of a Jacobi matrix from its mixed-type eigenpairs
Zhen-yun Peng, Xi-yan Hu and Lei Zhang

Structure theorem for the rotation group over Q
Guoyang Liu and Lewis C. Robertson

Perturbation analysis of the maximal solution of the matrix equation X+A*X-1A=P. II Ji-gunag Sun and Shu-Fang Xu

New perturbation results on pseudo-inverses of linear operators in Banach spaces Jiu Ding

Convergence theorems for parallel multisplitting two-stage iterative methods for mildly nonlinear systems
Zhong-Zhi Bai and Chuan-Long Wang

Matrix representation of quaternions
Richard William Farebrother, Jurgen Gro[ss] and Sven-Oliver Troschke

Enriched Krylov subspace methods for ill-posed problems
D. Calvetti, L. Reichel and A. Shuibi

Matrix inequalities with applications to the theory of iterated kernels
William Banks, Asma Harcharras, Stefan Neuwirth and Eric Ricard

A rank criterion for the order of a pole of a matrix function
Fei Zhou

A note on the integer eigenvalues of the Laplacian matrix of a balanced binary tree Oscar Rojo and Matilde Pena

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Special Issue on Nonnegative matrices, M-matrices and their generalizations, on the occasion of the workshop held at Oberwolfach, November 26 - December 2, 2000.

Special Eitors:
Daniel Hershkowitz, Judith J. McDonald, Reinhard Nabben

Special Issue on Nonnegative matrices, M-matrices and their generalizations
Daniel Hershkowitz, Judith J. McDonald, Reinhard Nabben

Perron eigenvector of the Tsetlin matrix R. B. Bapat

The maximal cp-rank of rank k completely positive matrices
F. Barioli and A. Berman

Minimal representations of inverted Sylvester and Lyapunov operators
Tobias Damm

Newton's method for concave operators with resolvent positive derivatives in ordered Banach spaces
T. Damm and D. Hinrichsen

Conditions for strict inequality in comparisons of spectral radii of splittings of different matrices
Ludwig Elsner,AndreasFrommer, Reinhard Nabben, Hans Schneider and Daniel B. Szyld

On the spectra of close-to-Schwarz matrices
Ludwig Elsner and Daniel Hershkowitz

On spectra of expansion graphs and matrix polynomials
K. -H. Forster and B. Nagy

Intervals of almost totally positive matrices Jurgen Garloff

On the roots of certain polynomials arising from the analysis of the Nelder-Mead simplex method
Lixing Han, Michael Neumann and Jianhong Xu

Generalized M-matrices and ordered Banach algebras
Gerd Herzog

On the class of Dk-symmetrizable matrices
Sawomir Jenek, Tomasz Szulc and Frank Uhlig

On the relative position of multiple eigenvalues in the spectrum of an Hermitian matrix with a given graph
Charles R. Johnson, Antonio Leal Duarte, Carlos M. Saiago, Brian D. Sutton
and Andrew J. Witt

CP rank of completely positive matrices of order 5
Raphael Loewy and Bit-Shun Tam

Convergence theory of some classes of iterative aggregation/disaggregation methods for computing stationary probability vectors of stochastic matrices
Ivo Marek and Petr Mayer

On the fixed points of the interval function [f]([x])=[A][x]+[b]
Gunter Mayer and Ingo Warnke

The peripheral spectrum of a nonnegative matrix Judith J. McDonald

On P-matrices Siegfried M. Rump

Perron-Frobenius theory for complex matrices Siegfried M. Rump

Exponents of nonnegative matrix pairs Bryan L. Shader and Saib Suwilo

Linear equations over cones and Collatz-Wielandt numbers
Bit-Shun Tam and Hans Schneider

Submitted by: Hans Schneider
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Madison, WI 53706-1313 USA Email: hans@math.wisc.edu
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------- end -------

IPNet Digest Volume 10, Number 03 March 31, 2003

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

Today's Topics:
Announcement: Inverse Problems Theme Year 2003 - 2004
Int'l Symposium: Inverse Problems, Design and Optimization
SIAM Conference: SIAM International Conference on Data Mining
Travel Grants: Elsevier-sponsored, to 2003 SIAM Annual Meeting
Table of Contents: Inverse Problems
Table of Contents: Linear Algebra and Its Applications

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Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Inverse Problems Theme Year 2003-2004 <inverseyear@math.hut.fi>
Subject: First Announcement: Inverse Problems Theme Year 2003 - 2004
Date: Mon, 31 Mar 2003

First Announcement of the meeting Analytic and Geometric Methods in Inverse Problems, Helsinki, Finland, August 25.-29.2003

The Finnish Inverse Problem Society together with the Finnish Mathematical Society arranges a theme year of inverse problems in Finland during the academic year 2003-2004. The theme year includes a series of conferences and intensive courses on inverse problems and related topics in mathematics.

The aim of the meeting entitled Analytic and Geometric Methods in Inverse Problems is to bring together a number of specialists in inverse problems, and in particular to focus on modern analytic and geometric tools. The preliminary list of invited speakers includes:

Carlos Alves
Juan Antonio Barcelo
Elena Beretta
Khosrow Chadan
David Colton
Elisa Francini
Allan Greenleaf
Alberto Grunbaum
Martijn de Hoop
David Isaacson
Alexander Katchalov
Rainer Kress
Yaroslav V. Kurylev
Stephen McDowall
Adrian Nachman
Cliff Nolan
Alberto Ruiz
William Rundell
Vladimir Sharafutdinov
Gunther Uhlmann

Michael Vogelius

We ask the interested to visit the web page of the theme year,

http://www.math.hut.fi/inverseyear/

where you find the necessary information about registration and accommodation. Please note that the deadline for the early registration is April 30, 2003.

Just after the opening conference on September 1.-5., there will be a Workshop on Inverse Spectral Problems. It is sponsored by the European Science Foundation's programme Partial Differential Operators and Spectral Theory.

The main speakers here are

Maciej Zworski (University of Berkeley)
Carolyn Gordon (Dartmouth College)
David L. Webb (Dartmouth College)
Peter Perry (University of Kentucky)
Michiel van den Berg (University of Bristol)
Slava Kurylev (University of Loughborough)
Matti Lassas (University of Helsinki)

If you are going to participate in the workshop you should mention this when you do the registration.

For young researchers and graduate students, financial support towards the expenses of participation is available both for the opening conference of the theme year and the workshop.

From: Helcio Rangel Barreto Orlande <helcio@lmt.coppe.ufrj.br>
Subject: Inverse Problems, Design and Optimization
Date: Fri, 28 Mar 2003

Dear Colleague:

We are in the process of defining dates for a three-day international symposium on

INVERSE PROBLEMS, DESIGN AND OPTIMIZATION

to be held in Rio de Janeiro in March or April of 2004.

The conference will emphasize a broad range of deterministic, statistical, mathematical, computational and experimental approaches, which can be applied to the solution of inverse, design and multi-disciplinary optimization problems. The topics listed below give a general guideline for possible contributions:

Acoustics
Vibrations and structural dynamics
Electromagnetism
Nuclear transport
Geophysics
Multi-objective optimization
Imaging
Design of experiments

Heat and mass transfer
Physical property estimation
Fluid mechanics
Signal and noise processing
Solid mechanics
Benchmark results
Tomography
Novel inverse methodologies
Chemistry and combustion
Inverse scattering
Materials processing
Uncertainty and decision making

Contributions dealing with practical applications are encouraged, such as in petrochemistry, aeronautics, astronautics, bio-medicine, groundwater flow, materials processing, remote sensing, non-destructive evaluation, etc. We expect anywhere between 80 and 150 international participants that will have an opportunity to present their research and learn about related mathematical formulations, methods, algorithms and applications thus providing an excellent environment for developing new concepts.

Please respond to this e-mail as soon as possible and indicate which of the following choices for the conference week would be the most acceptable to you.

March 1-5, 2004
March 8-12, 2004
March 15-19, 2004
March 22-26, 2004
March 29-April 2, 2004
April 5-9, 2004

Please note that Carnival will be during February 21-25, 2004 and Easter Sunday will be on April 11, 2004. During these holidays, prices and availability of accommodation and flights will be severely affected.

Thank you for taking your time to respond to this message as soon as possible.

Chair: Prof. George S. Dulikravich
MAIDO Institute
University of Texas at Arlington
MAE Dept., Box 19018 (817) 272-7376
Arlington, Texas 76019 USA dulikra@mae.uta.edu

Co-chair: Prof. Helcio R. B. Orlande
PEM/COPPE/UFRJ
Federal University of Rio de Janeiro
CP 68503
Rio de Janeiro, RJ 21945-970
BRAZIL helcio@serv.com.ufrj.br

From: "Darrell Ross" <ross@siam.org>
Subject: SIAM International Conference on Data Mining Reminder!
Date: Thu, 13 Mar 2003

Subject: SIAM International Conference on Data Mining Reminder!

Conference Name: SIAM International Conference on Data Mining

Location: Cathedral Hill Hotel, San Francisco, CA

Dates: May 1-3, 2003

Reminder, the deadlines Preregistration and Hotel Registration are fast approaching!

The Preregistration and Hotel Registration deadlines are on Wednesday, April 2, 2003. SAVE and register now!

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

http://www.siam.org/meetings/sdm03/

Darrell Ross
SIAM, Conference Program Manager
Conference Web Master
ross@siam.org

From: michelle montgomery <montgomery@siam.org>
Subject: Elsevier sponsors Travel Grants to 2003 SIAM Annual Meeting
Date: Mon, 03 Mar 2003

Elsevier sponsors Travel Grants to the 2003 SIAM Annual Meeting.

Five grants are available.

Program information for 2003 SIAM Annual Meeting at
http://www.siam.org/meetings/AN03

To qualify:
Individuals must be mathematical scientists with full time appointments in universities in "outreach" countries, for whom attendance would otherwise not be within reach. Any country on the list of countries to which we extend SIAM "outreach" membership rates -- you can find the list of countries at
https://www.siam.org/membership/outreachlist.htm
-- will qualify.

Award:
1. round-trip excursion rate airfare (most economical available) to the 2003 SIAM Annual Meeting
2. US$250 to help defray costs while at the meeting
3. one year paid SIAM "outreach" member dues
***SIAM will waive registration fees for the five awardees.

To apply:
Send a cover letter stating your intention to attend the 2003 SIAM Annual Meeting and explaining the reasons for your request.

Provide a letter from your home university or institute expressing support for your attendance at the meeting. The letter should confirm your position, provide the title of your position and be signed by a department chairman or supervisor. A commitment to fund the remainder of the cost of travel/expenses not covered by the award should also be

stated.

Individuals who will be presenting papers at the conference will be given priority. Append to the letter a copy of the abstract of your presentation. The presentation itself must be submitted by normal channels.

Potential awardees must be able to receive permission to travel to Montreal, Canada, with the intent of attending the 2003 SIAM Annual Meeting.

Applications must be received by 1 April 2003.

Selection:
The awardees will be selected by a SIAM committee. The tentative list of winners to be submitted to Elsevier Science for approval on or before 1 May 2003.

Applications for the Travel Grants should be sent to:
SIAM
Attn.: Elsevier/SIAM Travel Grant Application
3600 University City Science Center
Philadelphia, PA 19104 USA

Meetings@siam.org
Fax: 215-386-7999

From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents list for Inverse Problems
Date: Fri, 14 Mar 2003

Inverse Problems April 2003 Vol. 19, Issue 2
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All articles are free for 30 days after publication on the web. This issue is available at: http://stacks.iop.org/0266-5611/19/i=2

TOPICAL REVIEW
Separable nonlinear least squares: the variable projection method and its applications G Golub and V Pereyra

PAPERS
Hausdorff moments in an inverse problem for the heat equation: numerical experiment Y V Kurylev, N Mandache and K S Peat

Selecting Bayesian priors for stochastic rates using extended functional models G J Gibson

The linear sampling method for cracks F Cakoni and D Colton

Solution of inverse problems in elasticity imaging using the adjoint method A A Oberai, N H Gokhale and G R Feij\'oo

A two-step algorithm for the reconstruction of perfectly reflecting periodic profiles G Bruckner and J Elschner

A sequential minimization algorithm based on the convexification approach M V Klibanov and A Timonov

A projective method for an inverse source problem of the Poisson equation T Nara and S Ando

Optical tomography for small volume absorbing inclusions G Bal

Quasi-Newton methods in optical tomographic image reconstruction A D Klose and A H Hielscher

Solving an inverse problem for Urison-type integral equations using Banach's fixed point theorem H Kunze and S Gomes

Environmental uncertainty in ocean acoustic source localization S E Dosso

TIGRA---an iterative algorithm for regularizing nonlinear ill-posed problems R Ramlau

An inverse spectral problem for a Schr\"odinger operator with an unbounded potential L Cardoulis, M Cristofol and P Gaitan

An inverse problem for three-dimensional x-ray scatter/transmission imaging F El Khettabi and E M A Hussein

Submitted by: Elizabeth Martin, Senior Production Editor
Inverse Problems
Institute of Physics Publishing
Dirac House, Temple Back, Bristol BS1 6BE UK
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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Fri, 7 Mar 2003

Linear Algebra and its Applications May 2003 Volume 364
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Classifying quadratic maps from plane to plane
R. Duran Diaz, J. Munoz Masque and A. Peinado Dominguez

Characterizations and lower bounds for the spread of a normal matrix
Jorma Kaarlo Merikoski and Ravinder Kumar

Quadrature formulas for matrix measures--a geometric approach
Holger Dette and William J. Studden

Generalizations of the Ostrowski-Brauer theorem L. Yu. Kolotilina

Eigenvalues of matrices with several prescribed blocks, II
Gloria Cravo and Fernando C. Silva

Minimal-volume projections of cubes and totally unimodular matrices
M. I. Ostrovskii

Positivity of principal minors, sign symmetry and stability
Daniel Hershkowitz and Nathan Keller

Affine automorphisms that are isometries Zbigniew Jelonek

The characterization of symmetric primitive matrices with exponent n-1
Jun-Liang Cai and Bo-Ying Wang

The solvability conditions for the inverse eigenvalue problems of centro-symmetric matrices Fu-Zhao Zhou, Xi-Yan Hu and Lei Zhang

Optimal low-rank approximation to a correlation matrix
Zhenyue Zhang and Lixin Wu

Stability of eigenvalues and spectral decompositions under linear perturbation R. Alam and S. Bora

Condition for the numerical range to contain an elliptic disc
Hwa-Long Gau and Pei Yuan Wu

Permanents of woven matrices
Gi-Sang Cheon, Suk-Geun Hwang, Bryan L. Shader and Seok-Zun Song

Computing matrix-vector products with centrosymmetric and centrohermitian matrices Heike Fassbender and Khakim D. Ikramov

On the number of arcs in primitive digraphs with large exponents
Jian Shen and Cynthia J. Wyels

More on modifications and improvements of classical iterative schemes for M-matrices A. Hadjidimos, D. Noutsos and M. Tzoumas

Looking for nonnegative solutions of a Leontief dynamic model
Manuela S. Silva and Teresa P. de Lima

Spectrum and commutativity preserving mappings on H2
Tatjana Petek and Humberto Sarria

On the Craig-Sakamoto theorem and Olkin's determinantal result
Masaya Matsuura

http://www.sciencedirect.com/science/issue/5653-2003-996359999-400015

Submitted by: Hans Schneider
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------- end -------

IPNet Digest Volume 10, Number 04 May 3, 2003

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

Today's Topics:
Int'l Conference: Inverse Problems: Modeling and Simulation
SIAM Conference: Mathematics for Industry
SIAM/CAIMS Conference: Annual Meeting
SIAM Conference: Geometric Design and Computing
HYDRUS-2D book: Section on Inverse Paramater Estimation
Special Issue of LAA: Positivity in Linear Algebra
Table of Contents: Linear Algebra and Its Applications

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

Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Prof. Heinz W. Engl <engl@indmath.uni-linz.ac.at>
Subject: Inverse Problems: Modeling and Simulation
Date: Sat, 3 May 2003

The International Conference "Inverse Problems: Modeling and Simulation"

June 07-12, 2004, Fethiye, Turkey

The First Announcement

The International Conference "Inverse Problems: Modeling and Simulation" will be held during June 07-12, 2004, in the historic city of Fethiye, on the Mediterranean Sea, in Turkey. The main aim of the 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. The proposed International Conference will be under the auspices of such international journals as Inverse Problems, Inverse Problems in Engineering, Inverse and Ill-Posed Problems, and Computational Methods in Applied Mathematics.

The organizers of the Conference, in particular the Fethiye 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 International Conference "Inverse Problems: Modeling and Simulation"

CHAIRS:
Heinz W. Engl (Radon Institute for Computational and Applied Mathematics, Austria)
Alemdar Hasanov (Hasanoglu) (Kocaeli University, Turkey)
Sergey Kabanikhin (Sobolev Institute of Mathematics, Russia)

Preliminary list of members of the
INTERNATIONAL PROGRAM COMMITTEE
(further members to be confirmed):

M. Bektemesov (Almaty, Kazakhstan)
M. Burger (UCLA)
A. Iserles (Cambridge, UK)
V. Isakov (Wichita State, USA)
A. Jaoua (Tunis)
R. Kress (Goettingen, Germany)
M.M. Lavrentiev (Novosibirsk, Russia)
Li Ta-Tsien (Fudan, Shanghai)
V.G. Romanov (Novosibirsk, Russia)
M. Pidcock (Oxford Brookes, UK)
G. Uhlmann (Univ. of Washingon, USA)
V.V. Vasin (Ekaterinburg, Russia)
M. Yamamoto (Tokyo, Japan)
J. Zou (Chinese Univ. of Hongkong. China)

Main topics:
 * inverse problems in geophysical sciences;
 * inverse problems in underwater acoustics;
 * inverse problems in signal and image processing;
 * wavelets and inverse problems;
 * inverse scattering problems;
 * links between optimization and inverse problems;
 * Monte-Carlo formulation of inverse problems;
 * control problems and inverse problems;
 * inverse problems in fluid dynamics;
 * inverse problems in potential theory;
 * determination of physical and mechanical properties of media;
 * numerical simulation and analysis of inverse and ill-posed problems;
 * regularization of ill-posed problems.

Deadlines:
Proposal of Special Sessions December 31, 2003
Abstracts January 31, 2004

Abstracts:

The abstracts of the Conference, consisting of the all lectures (one LaTex page), will be published. All participants will obtain copies during the Conference.

Abstracts are due by January 31, 2004 and should be sent to both of the following email addresses:

nikolaus@indmath.uni-linz.ac.at, oznur@kou.edu.tr

Visas:
Visas are not required for participants coming from any country.

Hotel Accomodations
A large number of rooms will be reserved in various close hotels throughout Ovacik town, Oludeniz-Fethiye (www.oludeniz.org), one of the historical places of the Mediterranian Sea Region. The hotel rooms will be reserved at specially discounted rates, and all the hotels are within 5 to 15 min. walking distance of each other. The prices (between 300-600USD for a week) will include breakfast and dinner.

All the hotels are 50 km from the international airport at Dalaman.

Participants, as well as accompanying persons, need to pay an

additional USD 100 to the account of the conference for lunch, which will be served during the conference (meetings), and for transportation to/from hotels /palace of Culture.

Due to the expenses involved all participants including speakers are required to pay the registration fee.

Registration Fee:	Received by Decemb. 31, 2003	by Jan. 31, 2004	by Mar. 31, 2004
Nonstudent	USD 150	USD 175	USD 200
Student	USD 75	USD 100	USD 100

Banktransfer: Pamukbank, Izmit Branch, Izmit-Kocaeli, TURKEY
Account No: 442-23867234 Account Name: International Workshop
In the bank transfer please show your name, surname and the name of hotel you have chosen and keep the receipt.

Social Programs
Social Programs consist of Opening and Closing Ceremonies, Cocktail Party, Banquet and visits to historical places plus boat tours. There is no fee for registered participants.

Transportation

The hotels are 50 minutes from the international airport at Dalaman. Representatives of the hotels will meet participants at the Information Service of the airport. A Conference bus service will provide transportation on June 07, 2004, from the international airport at Antalya.

Contact Address

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Submitted by:
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and
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Austrian Academy of Sciences; http://www.ricam.oeaw.ac.at
EMail: heinz.engl@oeaw.ac.at

From: Kirsten Wilden <wilden@siam.org>
Subject: SIAM Conference on Mathematics for Industry
Date: Wed, 09 Apr 2003

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

Conference Name: SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI03)

Location: The Metropolitan Hotel, Toronto, Canada

Dates: June 23-25, 2003

Registration is Now Available!

Pre-Registration Deadline is Friday, May 16, 2003.

Registration for this conference is available at:
http://www.siam.org/meetings/mi03/

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

From: Connie Young <cyoung@siam.org>
Subject: SIAM/CAIMS Annual Meeting
Date: Wed, 09 Apr 2003

Conference Name: First Joint Meeting of CAIMS and SIAM
24th Annual Meeting of CAIMS/SCMAI
2003 SIAM Annual Meeting

Location: Queen Elizabeth Hotel, Montreal, QC, Canada

Dates: June 16-20, 2003

The program schedule for this meeting is now available at:
http://www.siam.org/meetings/an03/
For additional information, contact SIAM Conference Department at meetings@siam.org

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From: "Darrell Ross" <ross@siam.org>
Subject: SIAM Conference on Geometric Design and Computing: Participation Reminder!
Date: Fri, 11 Apr 2003

Subject: SIAM Conference on Geometric Design and Computing(GD03)

Conference Name: The SIAM Conference on Geometric Design and Computing

Location: Grand Hyatt Seattle, Seattle, Washington

Dates: November, 10-13, 2003

Reminder, the Call for Presentations deadlines for GD03 are fast approaching!

Participation deadlines close on MAY 7, 2003
For more information please visit: http://www.siam.org/meetings/GD03/

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

Submitted by: Darrell Ross
SIAM, Conference Program Manager
Conference Web Master
ross@siam.org

From: "Jirka SIMUNEK" <JSIMUNEK@ussl.ars.usda.gov>
Subject: HYDRUS-2D book: Section on Inverse Paramater Estimation
Date: Wed, 23 Apr 2003

Subject: Announcement for HYDRUS-2D book

We are pleased to announce the release of the new HYDRUS-2D book. This 250-page document will answer all your HYDRUS queries, especially those that are neither addressed in the Technical Manual nor in the on-line Help. It is accompanied by a CD that includes over 100 examples.

The book is structured into 8 major parts:

1 - Introductory tutorial examples
2 - A detailed journey through HYDRUS windows.
3 - Simulating plant water uptake.
4 - Includes 13 advanced examples that cover soil science and engineering
    applications.
5 - A comprehensive section on inverse parameter estimation.
6 - Trouble shooting helps achieve trouble-free simulations.
7 - Appendixes cover theoretical background and tutorial examples on
solute
    transport.
8 - Windows index.

You can easily find your way through this document by accessing two types of indexes; a traditional alphabetical index, and a windows-index that describes over 90 HYDRUS windows. The indexes direct you to relevant pages as well as related examples.

Although this document is aimed at HYDRUS-2D users, HYDRUS-1D users may also benefit from information on boundary conditions and their meaning, handling output files, simulations on root water uptake, inverse modelling (examples on root water uptake and inverse work are basically 1-D runs set in a 2-D environment), trouble shooting, and generic theoretical background information. The example projects and their results can be viewed on a demo-version of HYDRUS-2D, which is freely available on the distribution CD and downloadable from the web.

Please find the time to read through the attached 'pdf' file or visit
http://typhoon.mines.edu/software/igwmcsoft/hydrus_book.htm

THANK YOU

The HYDRUS-Manual Team

Price: US$80 (excludes postage & handling)
FOR ORDERS
Email: hydrus@optusnet.com.au
Fax: 61 7 3376 7454

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA announcement

Date: Fri, 18 Apr 2003

LINEAR ALGEBRA AND ITS APPLICATIONS
Special issue on Positivity in Linear Algebra

Call for papers (Reminder)

Positivity in linear algebra arises in many different forms and flavors. It includes the study of matrices with nonnegative entries (Perron-Frobenius theory), matrices with positive principle minors (P-matrices, positive definite matrices, totally positive matrices), as well as linear maps with characteristics that generalize or combine these notions of positivity (e.g., positive operators, cone preserving maps).

The applications of positivity as a linear algebraic notion are indeed numerous, ranging from the physical and social sciences to other mathematical areas like graph theory, optimization, stochastic processes, statistics, dynamical systems and numerical analysis. The benefit is mutual as many advances in these areas are being achieved with the aid of linear algebra and its notions of positivity, which in turn are enriched by ideas, challenges and goals for the future.

For this special issue, we are looking for papers that primarily advance knowledge about positivity in linear algebra and the associated matrix classes, or that extend the reach of their theory in applications and in other mathematical fields.

Areas and topics of interest include, but are not limited to the following:

- Entrywise positive (nonnegative) matrices.
- M-matrices and their inverses.
- Eventually nonnegative matrices.
- Positive (semi-)definite matrices.
- Totally positive (nonnegative) matrices.
- P-matrices.
- Cone preserving maps.
- Positive stability.
- Generalizations of the above in the context of operator theory and matrix functions.

All papers submitted must meet the publication standards of Linear Algebra and its Applications and will be refereed in the usual way. They should be submitted to one of the special editors of this issue listed below by 31 August 2003.

Shaun Fallat
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For a listing of current special LAA issues see
http://www.math.wisc.edu/~hans/speciss.html

Submitted by: Hans Schneider
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Math Dept Fax: 608-263-8891

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Thu, 10 Apr 2003

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Edited by D. Happel, C.M. Ringel and J. Drozd

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Another algorithm for nonnegative matrices Manfred J. Bauch

Minimal singularities in orbit closures of matrix pencils
Jens Bender and Klaus Bongartz

Symmetric quiver settings with a regular ring of invariants
Raf Bocklandt

Linear operators on S-graded vector spaces Vitalij M. Bondarenko

On the kernel of an irreducible map Sheila Brenner

Irreducible maps and bilinear forms
Sheila Brenner, M. C. R. Butler and Alastair D. King

On positive roots of pg-critical algebras Thomas Brustle

Estimate of the number of one-parameter families of modules over a tame algebra Thomas Brustle and Vladimir V. Sergeichuk

Periodic Coxeter matrices Jose A. de la Pena

On spectral radii of Coxeter transformations
Vlastimil Dlab and Piroska Lakatos

On the dimension of faithful modules over finite dimensional basic algebras M. Domokos

Tame biextensions of derived tame hereditary algebras
Peter Draxler

Hochschild cohomology of incidence algebras as one-point extensions

Maria Andrea Gatica and Maria Julia Redondo

Monoidal structure of the category of u+q-modules
Elisabet Gunnlaugsdottir

Regular points in system spaces Yang Han and Mulan Liu

Quivers, cones and polytopes Lutz Hille

Variation on a theme of Richardson Lutz Hille and Gerhard Rohrle

Algebraic computations in derived categories Amrey Krause

A short proof for Auslander's defect formula Henning Krause

Rings of invariants of 2 x 2 matrices in positive characteristic
S. G. Kuz'min and A. N. Zubkov

Additive functions on quivers Helmut Lenzing and Liane Hasenberg

A note on applications of the 'Vector Enumerator' algorithm
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From elementary calculations to Hall polynomials R. Norenberg

Curves arising from Kronecker modules F. Okoh and F. A. Zorzitto

Strongly nilpotent matrices and Gelfand-Zetlin modules
Serge Ovsienko

Cellular algebras and Cartan matrices Changchang Xi and Dajing Xiang

Tame equipped posets Alexander Zavadskij

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Strong rank revealing LU factorizations L. Miranian and M. Gu

On an inequality for the Hadamard product of an M-matrix or an
H-matrix and its inverse Shuhuang Xiang

Monotonicity and *orthant-monotonicity of certain maximum norms
Boris Lavri

On simultaneously nilpotent fuzzy matrices
Yung-Yih Lur, Chin-Tzong Pang and Sy-Ming Guu

A note on Soderlind's conjecture Jigen Peng and Zong-Ben Xu

Ring isomorphisms and pentagon subspace lattices
Pengtong Li and Jipu Ma

Symplectic difference systems: variable stepsize discretization and
discrete quadratic functionals Roman Hilscher and Vera Zeidan

Adjacency preserving maps on upper triangular matrix algebras
W. L. Chooi, M. H. Lim and Peter emrl

Absolute equal distribution of families of finite sets
William F. Trench

On semimonotone matrices with nonnegative principal minors
Teresa H. Chu

The Cayley-Hamilton theorem and inverse problems for multiparameter systems Toma Koir

Complete stagnation of GMRES
Ilya Zavorin, Dianne P. O'Leary and Howard Elman

Completable filiform Lie algebras
JoseMariaAncochea Bermudez and Rutwig Campoamor

On characteristically nilpotent Lie algebras of type Q
Jose Maria Ancochea Bermudez and Rutwig Campoamor

Additive mappings that preserve rank one nilpotent operators
Wu Jing, Pengtong Li and Shijie Lu

On solutions of the matrix equations X-AXB=C and X-A\bar{X}B=C
Tongsong Jiang and Musheng Wei

Uniform primeness of the Jordan algebra of hermitian quaternion matrices Rok Straek

Characteristic polynomial of catacondensed systems Juan Rada

Markov chains and dynamic geometry of polygons
Jiu Ding, L. Richard Hitt and Xin-Min Zhang

Pairs of functions with indefinite Pick matrices
V. Bolotnikov, A. Kheifets and L. Rodman

On a lattice of hermitian-preserving cones
Muriel J. Skoug, Richard D. Hill and Joseph R. Siler

Spectral decomposition of real circulant matrices
Herbert Karner, Josef Schneid and Christoph W. Ueberhuber

Max-algebra: the linear algebra of combinatorics?
Peter Butkovi

Remarks on graphs with majority of eigenvalues at most -1
Dragan Stevanovi

A characterization of strong preservers of matrix majorization
LeRoy B. Beasley, Sang-Gu Lee and You-Ho Lee

Erratum to: "Ranks of tensors, secant varieties of Segre varieties and fat points" [Linear Algebra Appl. 355 (2002) 263-285]
M. V. Catalisano, A. V. Geramita and A. Gimigliano

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

IPNet Digest Volume 10, Number 05 June 7, 2003

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

Today's Topics:
Second Announcement: Inverse Problems Theme Year 2003 - 2004
New SIAM Book Series: Fundamentals of Algorithms
Special LAA issue on Matrices and Mathematical Biology
Table of Contents: Inverse Problems
Table of Contents: Inverse Problems in 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.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Inverse Problems Theme Year 2003-2004 <inverseyear@math.hut.fi>
Subject: Second Announcement: Inverse Problems Theme Year 2003 - 2004
Date: Fri, 30 May 2003

Second Announcement of the meeting Analytic and Geometric Methods in Inverse Problems, Helsinki, Finland, August 25-29 2003

The Finnish Inverse Problems Society together with the Finnish Mathematical Society arranges a theme year of inverse problems in Finland during the academic year 2003-2004. The theme year includes a series of conferences and intensive courses on inverse problems and related topics in mathematics.

The aim of the meeting entitled Analytic and Geometric Methods in Inverse Problems is to bring together a number of specialists in inverse problems, and in particular to focus on modern analytic and geometric tools. The preliminary list of invited speakers includes:

Tuncay Aktosun
Carlos Alves
Kari Astala
Juan Antonio Barcelo
Elena Beretta
Khosrow Chadan
David Colton
Allan Greenleaf
Alberto Grunbaum
Maarten de Hoop
David Isaacson
Alexander Katchalov
Rainer Kress
Yaroslav V. Kurylev
Stephen McDowall
Adrian Nachman
Clifford Nolan
Alberto Ruiz
William Rundell
Vladimir Sharafutdinov

Gunther Uhlmann
Michael Vogelius

We ask the interested to visit the web page of the theme year,

http://www.math.hut.fi/inverseyear/

where you find the necessary information about registration and accommodation. Please note that the deadline for registration is July 31, 2003.

Just after the opening conference on September 1.-5., there will be a Workshop on Inverse Spectral Problems. It is sponsored by the European Science Foundation's programme Partial Differential Operators and Spectral Theory.

The main speakers here are

Maciej Zworski (University of Berkeley)
Carolyn Gordon (Dartmouth College)
David L. Webb (Dartmouth College)
Peter Perry (University of Kentucky)
Michiel van den Berg (University of Bristol)
Slava Kurylev (University of Loughborough)
Matti Lassas (University of Helsinki)

If you are going to participate in the workshop you should mention this when you do the registration.

For young researchers and graduate students, financial support towards the expenses of participation is available both for the opening conference of the theme year and the workshop.

Inverse Problems Theme Year 2003 - 2004
inverseyear@math.hut.fi
http://www.math.hut.fi/inverseyear/

From: michelle montgomery <montgomery@siam.org>
Subject: Fundamentals of Algorithms - new SIAM book series
Date: Mon, 02 Jun 2003

Call For Manuscripts

SIAM Series on Fundamentals of Algorithms

SIAM is pleased to announce a new series, Fundamentals of Algorithms, and the first book in the series, _Solving Nonlinear Equations with Newton's Method_, by C. T. Kelley.

The goal of the Fundamental of Algorithms series is to provide a collection of short user-oriented books on state-of-the-art numerical methods. Written by experts, the books will provide readers with sufficient knowledge to choose an appropriate method for an application and understand the method's strengths and limitations. The books will cover a range of topics drawn from numerical analysis and scientific computing. The intended audience is researchers and practitioners using the methods, and upper level undergraduates in mathematics, engineering, and computational science.

What will distinguish a book in this series is the emphasis on explaining how to best choose a method, algorithm or software to solve a specific type of problem, and describing when a given method works or fails. The theory behind a numerical method will be presented at a level accessible to the practitioner. The books will contain guidance to help the reader troubleshoot solvers and interpret results. MATLAB is the preferred language for codes presented since it can be used across a wide variety of platforms and is an excellent environment for prototyping, testing, and problem solving.

The first book in the series, _Solving Nonlinear Equations with Newton's Method_ by C. T. Kelley, is an 104-page user-oriented guide to using Newton's method to solve nonlinear equations. Through algorithms in pseudo-code, practical examples, and MATLAB codes, the author shows how the user can choose an appropriate Newton-type method to solve a nonlinear system. Treated are Newton, Newton-Krylov, and Broyden methods, their weaknesses and strengths, and their implementation. MATLAB codes for the solvers are listed in the book and available over the Web.

In launching this series SIAM hopes to publish guides to numerical algorithms that are readily accessible to practitioners, contain practical advice not readily found elsewhere, and are accompanied by understandable codes implementing the algorithms.

Possible topics for the series include, but are not limited to:

quadrature/numerical integration
random number generation
structured linear systems (Toeplitz, Hankel, Vandermonde,...)
Monte-Carlo algorithms for simulation
linear least squares problems
algebraic Riccati equations
stochastic differential equations
large, sparse eigenvalue problems
semidefinite optimization
the fast Fourier transform
discrete ill-posed problems
multigrid methods
visualization

Proposals appropriate for the Fundamentals of Algorithms Series should be sent to:

Linda Thiel (Acquisitions Editor)
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From: Hans Schneider <hans@math.wisc.edu>
Subject: Special LAA issue on Matrices and Mathematical Biology
Date: Tue, 27 May 2003

LINEAR ALGEBRA AND ITS APPLICATIONS
Special issue on Matrices and Mathematical Biology

Second call for papers
Submission deadline extended to 30 November 2003

In the last decade the field of mathematical biology has expanded very rapidly. Biological research furnishes both data on and insight into the workings of biological systems. However, qualitative and quantitative modelling and simulation are still far from allowing current knowledge to be organized into a well-understood structure. Further, the diversity present in mathematical biology, coupled with the absence of a single unifying approach, has inspired the formation of entirely new scientific disciplines such as bioinformatics.

Theoretical research activity in mathematical biology is naturally of an interdisciplinary character. It involves mathematical and statistical investigations, sometimes in combination with techniques originating from the computational sciences. In many of these approaches, linear algebra is key to solving the mathematical problems which arise. For instance, in some population models, the asymptotic rate of increase of the population turns out to be the spectral radius of a certain matrix associated with the population, while the other eigenvalues also yield information on the evolution of the population's structure. Conversely, problems in mathematical biology can enrich linear algebra. For example, in attempting to measure the influence of a single matrix entry on a simple eigenvalue, linear algebraists frequently employ the derivative of that eigenvalue with respect to the entry. However, some biologists have proposed the use of the elasticity, or a logarithmic derivative, of an eigenvalue with respect to a matrix entry in order to measure the effect on that eigenvalue of perturbing a matrix entry. Thus linear algebraists are challenged to deepen and develop the understanding of the ways in which the effects of changes in the ecological conditions on the populations can be measured through further theoretical investigations.

A recent book by Caswell on matrix population models makes extensive use of linear algebraic techniques. Quoting from the introduction to that book: "Matrix population models -- carefully constructed, correctly analyzed, and properly interpreted - provide a theoretical basis for population models... A goal of this book is to raise the bar of what constitutes rigorous analysis in population models.... The work of the population biologist is too important to settle for less." But Caswell's call for careful mathematical construction and analysis applies to areas beyond the subject of population models; clearly a rigorous approach would benefit all areas of interaction between biology and mathematics.

The Special Issue of LAA dedicated to Matrices and Mathematical

Biology is intended to both foster and accelerate cross fertilization between those working primarily in linear algebra and those working primarily in mathematical biology. The editors hope that such an issue of LAA will be of benefit to both fields.

This special issue will be open for all submissions containing new and meaningful results that advance interaction between linear algebra and mathematical biology. The editors welcome submissions in which linear algebraic methods play an important role for novel approaches to problems arising in mathematical biology, or in which investigations in mathematical biology motivate new tools and problems in linear algebra. Survey papers which discuss specific areas involving the interaction between biology and linear algebra, particularly where such interaction has been successful, are also very welcome.

Areas and topics of interest for the special issue include, but are not limited to:

- metabolistic pathways
- statistical data analysis
- linear algebra problems in graph partitioning
- matrix population models
- model discrimination in biokinetics
- linear algebra problems in network analysis and synchronization
- subspace oriented eigenvalue problems
- aggregation/disaggregation or related techniques
- hidden Markov models
- epidemic models
- modelling phylogenetic trees

All papers submitted must meet the publication standards of Linear Algebra and its Applications and will be refereed in the usual way. They should be submitted to one of the special editors of this issue listed below by 30 November 2003.

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From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents, Inverse Problems, volume 19, issue 3, June 2003
Date: Thu, 15 May 2003

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All articles are free for 30 days after publication on the web. This issue is available at:
http://stacks.iop.org/0266-5611/19/i=3

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From: "James Beck" <jamesverebeck@attbi.com>
Subject: Contents, Inverse Problems in Engineering
Date: Mon, 5 May 2003

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From: Hans Schneider <hans@math.wisc.edu>
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http://www.sciencedirect.com/science/issue/5653-2003-996319999-433305

Submitted by: Hans Schneider

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

IPNet Digest Volume 10, Number 06 July 18, 2003

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

Today's Topics:
Symposium on Inverse Problems, Design, and Optimization
SIAM Conference on Mathematics for Industry - New Dates
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From: ipdo <ipdo@lmt.coppe.ufrj.br>
Subject: Symposium on Inverse Problems, Design, and Optimization
Date: Mon, 16 Jun 2003

FIRST ANNOUNCEMENT AND CALL FOR PAPERS
INVERSE PROBLEMS, DESIGN AND OPTIMIZATION SYMPOSIUM

March 17-19, 2004
Rio de Janeiro, Brazil
http://www.lmt.coppe.ufrj.br/ipdo
ipdo@lmt.coppe.ufrj.br

MOTIVATION AND OBJECTIVES
Inverse problems, design theories and multi-objective constrained optimization strategies are three areas of advanced research that are rapidly becoming of common use by practicing engineers and designers. Consequently, there is an upsurge in the number of separate scientific meetings in each of these three general areas. The main objective of the INVERSE PROBLEMS, DESIGN AND OPTIMIZATION (IPDO) SYMPOSIUM is to bring together the three communities of researchers (inverse problems, design theory and evolutionary optimization experts) and provide a common forum for presenting different applications, problems and solution concepts. The three major areas of research to be covered by the IPDO Symposium have a number of things in common. For example, many methodologies for solving inverse problems employ optimization algorithms. On the other hand, optimization techniques generally do not employ methods of inverse design, which could potentially reduce the number of time-consuming analysis required by the typical evolutionary algorithms. Similarly, design theory is commonly not used by the optimization community, where formulation of the appropriate multiple objectives and system-of-systems design formulations are often performed using intuition and personal experience. The IPDO Symposium will offer the first-of-a-kind and, therefore unique, international forum that should provide an excellent basis for cross-fertilization of ideas and creation of new synergistic approaches and methodologies combining these three fields of research.

SYMPOSIUM TOPICS

The topics listed below give a general guideline for possible contributions:
Acoustics
Vibrations and structural dynamics
Electromagnetism
Nuclear transport
Geophysics
Multi-objective optimization
ImagingDesign of experiments
Heat and mass transfer
Physical property estimation
Fluid mechanics
Signal and noise processing
Solid mechanics
Benchmark results
Tomography
Novel methodologies
Chemistry and combustion
Inverse scattering
Materials processing
Uncertainty and decision making

Contributions dealing with practical applications are encouraged, such as in petrochemistry, aeronautics, astronautics, bio-medicine, transport and sensing of pollutants, materials processing, remote sensing, non-destructive evaluation, material property determination, acceleration of optimization procedures, etc.

SUBMISSION, SELECTION, PRESENTATION AND PUBLICATION OF CONTRIBUTED PAPERS
Authors should send a one-page abstract in pdf (Portable Document Format) to ipdo@lmt.coppe.ufrj.br as an attachment to their e-mail message by August 29, 2003. Authors will be informed about the acceptance of their abstracts by September 26, 2003. Detailed instructions for the preparation of full manuscripts will be posted on the IPDO website

http://www.ipdo.lmt.coppe.ufrj.br.

The submitted papers will be evaluated by two competent reviewers. Only the accepted papers that are effectively presented in the IPDO symposium will appear in the proceedings. The proceedings will be published as a bound volume and sent to the symposium participants through airmail within six months after the symposium is finished. A book of abstracts and a CD-ROM containing all accepted papers will be available for the participants during registration. Authors may consider their papers for further review and possible publication in the journal Inverse Problems in Engineering (http://www.tandf.co.uk/journals/titles/10682767.html). When submitting the full papers to the IPDO symposium, the authors should indicate if they want to submit the papers to the Inverse Problems in Engineering journal as well. In this case, the review process will be more stringent and a third evaluation of the full paper will be requested. During the symposium, accepted papers will be presented in oral sessions held in the mornings and afternoons. Two tutorial sessions and a round-table discussion are scheduled in the late afternoons. Two keynote lecturers will be presented each day by prominent researchers from different fields.

SUMMARY OF IMPORTANT DATES

Abstracts due: August 29, 2003
Notification of abstract evaluation: September 26, 2003
Full papers due for review: November 21, 2003
Notification of paper evaluations: January 09, 2004
Final papers due: February 27, 2004

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SPONSORS AND PROMOTERS
NSF (National Science Foundation), UTA (University of Texas at Arlington), UFRJ (Federal University of Rio de Janeiro), ABCM (Brazilian Society of Mechanical Engineering and Sciences), SBMAC (Brazilian Society of Applied and Computational Mathematics), CNPq, CAPES, ANP, FAPERJ and Taylor & Francis Publishers.

LOCATION
The IPDO symposium will be held in a hotel on Copacabana Beach in Rio de Janeiro, Brazil. One of the major economic and cultural hubs of South America, the City of Rio de Janeiro sits at the heart of the Southeastern Region where 60% of the Brazilian GDP is concentrated. A cosmopolitan metropolis, known worldwide for its scenic beauty and its natural resources, the city provides a harmonious and agreeable environment for its inhabitants and visitors. The City of Rio de Janeiro, which occupies an area of 1,261 km2, and has a population of approximately six million, recognizes that one of its main virtues is the kindness and hospitality with which its residents welcome all visitors. Rio de Janeiro is ranked among the top destinations in the world for fairs, symposia, congresses, conventions and exhibitions. Its exuberant natural resources include 90 Km of fine sand beaches, the Tijuca National Park, which includes the largest urban forest in the world, with 3,200 hectares of Atlantic Forest, the State Parks of Pedra Branca, Desengano and Chacrinha, covering an area of 48,500 hectares, and the Rodrigo de Freitas, Jacarepagu, Camorim, Tijuca and Marapendi lakes and lagoons.

For the symposium participants, the destination shall be the Rio de Janeiro International Airport, which is served by major airline carriers, with everyday flights from many cities in North America, Europe and Asia. Brazil requires visas for several countries, including the United States. Please, check with the Brazilian Embassy in your country if you need a visa to be admitted to Brazil. Apply for your visa as soon as possible.

SYMPOSIUM FEES
IPDO fees include the symposium material (bag, badge, book of abstracts and
CD-ROM containing accepted papers), the symposium proceedings, coffee-breaks and the symposium reception. It does not include the symposium banquet. All participants (including members of the advisory committee and invited speakers) are required to register and pay a registration fee according to the following table:

	Before February 1, 2004	After February 1, 2004
General Participant	US $200.00	US $300.00
Bona fide Graduate Student	US $ 50.00	US $ 60.00
Guest	US $ 20.00	US $ 30.00

South American participants affiliated with ABCM or with SBMAC qualify for
half the registration fee.

From: Kirsten Wilden <wilden@siam.org>
Subject: SIAM Conference on Mathematics for Industry - New Dates
Date: Mon, 30 Jun 2003

Subject: Mathematics for Industry - New Conference and Registration Dates

Conference Name: SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI03)

Location: The Metropolitan Hotel, Toronto, Canada
New Dates: October 13-15, 2003

New registration deadline!
Pre-Registration Deadline is Monday, September 15, 2003.

Registration for this conference is available at:
http://www.siam.org/meetings/mi03/

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

From: "Darrell Ross" <ross@siam.org>
Subject: SIAM Conference on Mathematical Aspects of Materials Science
Date: Wed, 02 Jul 2003

Call for Papers!

SIAM Conference on Mathematical Aspects of Materials Science (MS04)
Hyatt Regency Los Angeles at Macy's Plaza
Los Angeles, California
http://losangelesregency.hyatt.com

The conference gathers an interdisciplinary group working on the development and application of sound mathematical and computational methods in the scientific study and practical exploitation of materials.

The Call for Presentations for this conference is now available at:

http://www.siam.org/meetings/ms04/index.htm

From: Johan Suykens <Johan.Suykens@esat.kuleuven.ac.be>
Subject: New Book on Learning Theory
Date: Mon, 09 Jun 2003

Announcement: New Book on Learning Theory

J.A.K. Suykens, G. Horvath, S. Basu, C. Micchelli, J. Vandewalle (Eds.)
Advances in Learning Theory: Methods, Models and Applications,
NATO Science Series III: Computer & Systems Sciences, Volume 190,
IOS Press Amsterdam, 2003, 436pp. (ISBN: 1 58603 341 7)
http://www.esat.kuleuven.ac.be/sista/natoasi/book.html
http://www.iospress.nl/site/html/boek-1722819779.html

Book edited at the occasion of the NATO-ASI (Advanced Study Institute) on Learning Theory and Practice (Leuven July 2002)
http://www.esat.kuleuven.ac.be/sista/natoasi/ltp2002.html

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From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents list for Inverse Problems, vol. 19, issue 4, Aug. 2003
Date: Fri, 18 Jul 2003

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CORRIGENDUM
Upper and lower estimates in determining point sources in a wave

equation V Komornik and M Yamamoto

Submitted by: Elizabeth Martin, Senior Production Editor, Inverse Problems Institute of Physics Publishing
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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Thu, 19 Jun 2003

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On the classification of the Lie algebras Lrs L. A. -M. Hanna

A wider class of stable gyroscopic systems
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On some interconnections between strict monotonicity, globally uniquely solvable, and P properties in semidefinite linear complementarity problems
M. Seetharama Gowda, Yoon Song and G. Ravindran

A note on the orthogonal basis of a certain full symmetry class of tensors C. Bessenrodt, M. R. Pournaki and A. Reifegerste

Two-dimensional reductions of the cone of positive diagonal operators in l2 Anatoly N. Sherstnev

http://www.sciencedirect.com/science/issue/5653-2003-996299999-440427

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

IPNet Digest Volume 10, Number 07 August 14, 2003

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

Today's Topics:
Tutorials and Workshops on Inverse Problems at IPAM
SIAM Conference on Imaging Science
SIAM Conference on Mathematical Aspects of Materials Science
SIAM Conference on Discrete Mathematics
Table of Contents: Inverse Problems in 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.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: "Prof. Heinz W. Engl" <engl@indmath.uni-linz.ac.at>
Subject: Inverse Problems: Announcement of Workshops
Date: Wed, 30 Jul 2003

Dear Colleagues,

I'd like to bring to your attention some important workshops that the Institute for Pure and Applied Mathematics (IPAM) is hosting as part of its program on "Inverse Problems: Computational Methods and Emerging Applications". More information on the program is on our website at www.ipam.ucla.edu/programs/inv2003

Tutorials: There will be tutorials for the program from September 9-12, 2003. Registration for these is free. For more information and a link to the schedule, please go to www.ipam.ucla.edu/programs/invtut

Industrial Problem Workshop: This is a special workshop featuring industrial problems to be solved by study groups and to be held from September 15-18, 2003. Participation in this workshop is by application only. Details are at www.ipam.ucla.edu/programs/invip

Workshop Series I: There are three segments to this series: Deconvolution and Related Inverse Problems in the Physical Sciences (Oct 16 - 18, 2003), Emerging Applications of Inverse Problems Techniques to Imaging Science (Oct 20 - 21, 2003), and Inverse Problems in the Life Sciences (Oct 22 - 23, 2003). Details on these segments, speakers, link to a schedule and registration information is on the website at www.ipam.ucla.edu/programs/invws1

Workshop Series II: There are four segments to this series: Inverse Problems in Materials Science (Nov 12 - 14, 2003), Level Set Methods for Inverse and Optimal Design Problems (Nov 12 - 14, 2003), Computational Methods for Inverse Problems and Applications (Nov 15, 17 - 19, 2003) and Inverse problems and learning theory and algorithms (Nov 20, 2003). Details on these segments, speakers, link to a schedule and registration information is on the website at www.ipam.ucla.edu/programs/invws2

We have funding to support the attendance and participation in these workshops for recent PhD's, graduate students, and researchers in the early stages of their career. Mathematicians at all levels who would like to learn more about this area are encouraged to apply for funding. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. Please go to the respective websites for more information.

Mark L. Green
Director, Institute for Pure and Applied Mathematics
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mlg@ipam.ucla.edu

Submitted by: Heinz W. Engl

From: Connie Young <cyoung@siam.org>
Subject: SIAM Conference on Imaging Science
Date: Wed, 30 Jul 2003

The Call for Presentations is now available at:
http://www.siam.org/meetings/is04/

SIAM Conference on Imaging Science (IS04)
May 3-5, 2004
Marriott City Center, Salt Lake City, Utah

Sponsored by the SIAM Activity Group on Imaging Science (SIAG/IS)

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Chris Johnson, University of Utah
Ross Whitaker, University of Utah

PROGRAM COMMITTEE (partial list)
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Akram Aldroubi, Vanderbilt University
Fred L. Bookstein, University of Michigan, Ann Arbor
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Stanley Osher, University of California, Los Angeles
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Michael Unser, École Polytechnique Fédérale de Lausanne, Switzerland
Joachim Weickert, Saarland University, Germany
Anthony Yezzi, Georgia Institute of Technology

CONFERENCE THEMES
Image acquisition
Image reconstruction and restoration
Image storage, compression, and retrieval
Image coding and transmission
PDEs in image filtering and processing
Image registration and warping
Image modeling and analysis

Statistical aspects of imaging
Wavelets and multiscale analysis
Multidimensional imaging sciences
Inverse problems in imaging sciences
Mathematics of visualization
Biomedical imaging
Applications

INVITED PLENARY SPEAKERS (partial list)
Peter Basser, National Institutes of Health
Gadiel Seroussi, Hewlett Packard
Arthur Toga, University of California, Los Angeles
David Wandell, Stanford University

DEADLINE DATES
Minisymposium proposals: October 2, 2003
Minisymposium abstracts: October 30, 2003
Contributed abstracts in lecture or poster format: October 30, 2003

Submission link: http://www.siam.org/meetings/is04/part.htm

From: "Darrell Ross" <ross@siam.org>
Subject: SIAM Conference on Mathematical Aspects of Materials Science
Date: Tue, 05 Aug 2003

Conference Name:
SIAM Conference on Mathematical Aspects of Materials Science

Location:
Hyatt Regency Los Angeles, at Macy's Plaza, Los Angeles, CA

Dates: May 23-26-2004

The Call for Presentations for this conference is now available at:
http://www.siam.org/meetings/ms04/

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

Regards,

Darrell Ross
SIAM, Conference Program Manager
Conference Web Master
ross@siam.org

From: Kirsten Wilden <wilden@siam.org>
Subject: SIAM Conference on Discrete Mathematics
Date: Mon, 04 Aug 2003

Subject: SIAM Conference on Discrete Mathematics (DM04) **CFP
Deadlines**

Conference Name: SIAM Conference on Discrete Mathematics (DM04)

Location: Loews Vanderbilt Plaza Hotel, Nashville, TN

Dates: June 13-16, 2004

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/dm04/

Deadlines

Deadline for submission of minisymposium proposals: December 11, 2003
Deadline for minisymposium abstracts and contributed abstracts: January 8, 2004
Deadline for contributed papers in lecture format: January 8, 2004

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

From: "James Beck" <jamesverebeck@comcast.net>
Subject: Inverse Prob in Engineering
Date: Wed, 13 Aug 2003

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Inverse Problem Techniques for the Identification of Rotor-Bearing Systems E.C. Assis and V. Steffen, Jr

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D.Xu, F.F. Yap, X. Han and C.L. Wen

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SPECIAL ISSUE of Inverse Problems in Engineering, Vol. 11, No. 3 (June 2003)

The 4th International Conference on Inverse Problems in Engineering

Rio de Janeiro, Brazil: 26-31 May, 2002

Guest Editor: llelcio R. B. Orlande

Integrating the Error in the Independent Variable for Optimal Parameter Estimation Part I: Different Estimation Strategies on Academic Cases Denis Maillet, Thomas Metzger and Sophie Didierjean

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3D Inverse Analysis Model Using Semi-Analytical Differentiation for Mechanical Parameter Estimation
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Optimal choice of descent steps in gradient-type methods when applied to combined parameter and function or multi-function estimation
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Inversion of elastic light scattering measurements to determine refractive index and particle size distribution of polymeric emulsions C. L. Frontim and E. M. F. Berdaguer

Adaptive multiscale estimation of a spatially dependent diffusion function within porous media flow
H. Kruger, A.-A. Grimstad and T. Mannseth

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beck@egr.msu.edu or
jvb@beckeng.com

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Tue, 12 Aug 2003

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A parameterization of positive definite matrices in terms of partial correlation vines Dorota Kurowicka and Roger Cooke

A characterization of Jordan canonical forms which are similar to eventually nonnegative matrices with the properties of nonnegative matrices Boris G. Zaslavsky and Judith J. McDonald

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A note on companion matrices Miroslav Fiedler

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http://www.sciencedirect.com/science/issue/5653-2003-996279999-446580

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IPNet Digest Volume 10, Number 08 September 11, 2003

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

Today's Topics:
Inverse Problems, Design and Optimization Symposium
The Thirteenth Inverse Problems in Engineering Seminar
SIAM Conference on Geometric Design & Computing
SIAM Conference on Mathematics for Industry
Table of Contents: Mathematics of Control, Signals, and Systems

Submissions for IPNet Digest:
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Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Helcio Orlande <ipdo@lmt.coppe.ufrj.br>
Subject: IPDO Symposium - NEW DEADLINE FOR ABSTRACT SUBMISSION
Date: Tue, 02 Sep 2003

SECOND ANNOUNCEMENT AND CALL FOR PAPERS
NEW DEADLINE FOR ABSTRACT SUBMISSION

INVERSE PROBLEMS, DESIGN AND OPTIMIZATION SYMPOSIUM

March 17-19, 2004
Rio de Janeiro, Brazil
http://www.lmt.coppe.ufrj.br/ipdo
ipdo@lmt.coppe.ufrj.br

MOTIVATION AND OBJECTIVES

Inverse problems, design theories and multi-objective constrained optimization strategies are three areas of advanced research that are rapidly becoming of common use by practicing engineers and designers. Consequently, there is an upsurge in the number of separate scientific meetings in each of these three general areas. The main objective of the INVERSE PROBLEMS, DESIGN AND OPTIMIZATION (IPDO) SYMPOSIUM is to bring together the three communities of researchers (inverse problems, design theory and evolutionary optimization experts) and provide a common forum for presenting different applications, problems and solution concepts. The three major areas of research to be covered by the IPDO Symposium have a number of things in common. For example, many methodologies for solving inverse problems employ optimization algorithms. On the other hand, optimization techniques generally do not employ methods of inverse design, which could potentially reduce the number of time-consuming analysis required by the typical evolutionary algorithms. Similarly, design theory is commonly not used by the optimization community, where formulation of the appropriate multiple objectives and system-of-systems design formulations are often performed using intuition and personal experience. The IPDO Symposium will offer the first-of-a-kind and, therefore unique, international forum that should provide an excellent basis for cross-fertilization of ideas and creation of new synergistic approaches and methodologies combining these three fields of research.

SYMPOSIUM TOPICS
The topics listed below give a general guideline for possible contributions:
Acoustics Vibrations and structural dynamics
Electromagnetism Nuclear transport
Geophysics Multi-objective optimization
Imaging Design of experiments
Heat and mass transfer Physical property estimation
Fluid mechanics Signal and noise processing
Solid mechanics Benchmark results
Tomography Novel methodologies
Chemistry and combustion Inverse scattering
Materials processing Uncertainty and decision making

Contributions dealing with practical applications are encouraged, such as in petrochemistry, aeronautics, astronautics, bio-medicine, transport and sensing of pollutants, materials processing, remote sensing, non-destructive evaluation, material property determination, acceleration of optimization procedures, etc.

SUBMISSION, SELECTION, PRESENTATION AND PUBLICATION OF CONTRIBUTED PAPERS
Authors should send a one-page abstract in pdf (Portable Document Format) to ipdo@lmt.coppe.ufrj.br as an attachment to their e-mail message by September19, 2003. Authors will be informed about the acceptance of their abstracts by October 17, 2003. Detailed instructions for the preparation of full manuscripts will be posted on the IPDO website http://www.lmt.coppe.ufrj.br/ipdo/ .

The submitted papers will be evaluated by two competent reviewers. Only the accepted papers that are effectively presented in the IPDO symposium will appear in the proceedings. The proceedings will be published as a bound volume and sent to the symposium participants through airmail within six months after the symposium is finished. A book of abstracts and a CD-ROM containing all accepted papers will be available for the participants during registration. Authors may consider their papers for further review and possible publication in the journal Inverse Problems in Engineering (http://www.tandf.co.uk/journals/titles/10682767.html). When submitting the full papers to the IPDO symposium, the authors should indicate if they want to submit the papers to the Inverse Problems in Engineering journal as well. In this case, the review process will be more stringent and a third evaluation of the full paper will be requested. During the symposium, accepted papers will be presented in oral sessions held in the mornings and afternoons. Two tutorial sessions and a round-table discussion are scheduled in the late afternoons. Two keynote lecturers will be presented each day by prominent researchers from different fields.

SUMMARY OF IMPORTANT DATES
Abstracts due: September 19, 2003
Notification of abstract evaluation: October 17, 2003
Full papers due for review: December 05, 2003
Notification of paper evaluations: January 09, 2004
Final papers due: February 27, 2004

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SPONSORS AND PROMOTERS
NSF (National Science Foundation), UFRJ (Federal University of Rio de Janeiro), ABCM (Brazilian Society of Mechanical Engineering and Sciences), SBMAC (Brazilian Society of Applied and Computational Mathematics), CNPq, CAPES, ANP, FAPERJ and Taylor & Francis Publishers.

LOCATION
The IPDO symposium will be held in a hotel on Copacabana Beach in Rio de Janeiro, Brazil. One of the major economic and cultural hubs of South America, the City of Rio de Janeiro sits at the heart of the Southeastern Region where 60% of the Brazilian GDP is concentrated. A cosmopolitan metropolis, known worldwide for its scenic beauty and its natural resources, the city provides a harmonious and agreeable environment for its inhabitants and visitors. The City of Rio de Janeiro, which occupies an area of 1,261 km2, and has a population of approximately six million, recognizes that one of its main virtues is the kindness and hospitality with which its residents welcome all visitors. Rio de Janeiro is ranked among the top destinations in the world for fairs, symposia, congresses, conventions and exhibitions. Its exuberant natural resources include 90 Km of fine sand beaches, the Tijuca National Park, which includes the largest urban forest in the world, with 3,200 hectares of Atlantic Forest, the State Parks of Pedra Branca, Desengano and Chacrinha, covering an area of 48,500 hectares, and the Rodrigo de Freitas, Jacarepagu, Camorim, Tijuca and Marapendi lakes and lagoons. For the symposium participants, the destination shall be the Rio de Janeiro International Airport, which is served by major airline carriers, with everyday flights from many cities in North America, Europe and Asia. Brazil requires visas for several countries, including the United States. Please, check with the Brazilian Embassy in your country if you need a visa to be admitted to Brazil. Apply for your visa as soon as possible.

SYMPOSIUM FEES
IPDO fees include the symposium material (bag, badge, book of abstracts and CD-ROM containing accepted papers), the symposium proceedings, coffee-breaks and the symposium reception. It does not include the symposium banquet. All participants (including members of the advisory committee and invited speakers) are required to register and pay a registration fee according to the following table:

	Before February 1, 2004	After February 1, 2004
General Participant	US $200.00	US $300.00
Bona fide Graduate Student	US $ 50.00	US $ 60.00
Guest	US $ 20.00	US $ 30.00

South American participants affiliated with ABCM or with SBMAC qualify for half the registration fee.

Please visit the web-site for the Inverse Problems, Design and Optimization
Symposium: http://www.lmt.coppe.ufrj.br/ipdo/

Submitted by: Prof. Helcio R. B. Orlande

From: "Keith A. Woodbury" <woodbury@me.ua.edu>
Subject: The Thirteenth Inverse Problems in Engineering Seminar
Date: Tue, 9 Sep 2003

The Thirteenth Inverse Problems in Engineering Seminar
Monday, June 14 -- Tuesday, June 15, 2004
University of Cincinnati, Department of Mathematical Sciences

http://myrtle.csm.uc.edu/ipes2004

CALL FOR PAPERS

The Thirteenth Inverse Problems in Engineering Seminar is being organized by the Department of Mathematical Sciences at the University of Cincinnati. This event is the continuation of the informal seminars which were initiated at Michigan State University in 1988. This seminar will be sponsored by the McMicken College of Arts & Sciences, C. P. Taft Memorial Fund, Office of Vice President for Research and University Dean of Advanced Studies, and the Department of Mathematical Sciences at the University of Cincinnati. Papers are solicited from all areas involving inverse methods and their applications. Four broad categories are being used to organize sessions. These categories, with some subtopics delineated, are:

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

Presentations will be twenty minutes, followed by discussion. If the number of submissions warrants additional program time, a poster session will be included.

Please submit a tentative title and an abstract (300 words) by December 10, 2003. Send titles and abstracts or other inquiries to either:

Chair:
Professor Diego A. Murio
University of Cincinnati
Department of Mathematical Sciences
Mail Location 25
Cincinnati, OH 45221-0025
Phone:(513)556-4088
Fax:(513)556-3417
diego@dmurio.csm.uc.edu

Co-Chair:
Professor Keith A. Woodbury
The University of Alabama
Dept. of Mechanical Engineering
Box 870276
Tuscaloosa, AL 35487-1647
Phone:(205)348-1647
woodbury@me.ua.edu

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C. E. Mejia, National University of Colombia, Medellin, COLOMBIA
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M. Raynaud, INSA de Lyon, FRANCE
S. V. Reznik, Bauman Moscow State Technical University, RUSSIA
A. J. da Silva Neto, State University of Rio de Janeiro, BRAZIL
D. Tortorelli, University of Illinois-Urbana Champaign, USA
K. A. Woodbury, (Seminar Co-Chairman), The University of Alabama, USA
A. G. Yagola, Moscow State University, RUSSIA

Time Schedule

December 10, 2003	Submit abstracts (300 words).
January 10, 2004	Preliminary acceptance notification to the authors.
February 10, 2004	Submit pdf version of the full paper for review.
April 10, 2004	Final acceptance notification to authors.
May 10, 2004	Submit final camera-ready version of the full paper for the Proceedings.

Registration Fee
A registration fee of $100 covers breakfast and lunch on both days as well as refreshments during morning and afternoon breaks and the Seminar Dinner. Each registered participant will receive a copy of the Proceedings at the beginning of the seminar.

The final day for registration is May 10, 2004. Please fill in the Registration Form below and submit it together with a check may payable to the University of Cincinnati.

HOTEL INFORMATION
The Vernon Manor Hotel, 400 Oak Street, Cincinnati, Ohio 45219, is a very nice place with free shuttle service to the U.C. campus and downtown Cincinnati. Our very special rate schedule ranges from $69 to $79 (a suite is $99). Guests are welcome to use the toll-free number (800-543-3999) for reservations or call (513)281-3300. Please make sure to mention the 'Thirteenth Inverse Problems in Engineering Seminar' in order to be offered the special rates.

For further questions or inquiries, visit
http://myrtle.csm.uc.edu/ipes2004
or send an email message to diego@dmurio.csm.uc.edu

[This news item has been edited for length. Please see above URL and e-mail address for further information. -Ed.]

From: Connie Young <cyoung@siam.org>
Subject: SIAM Conference on Geometric Design & Computing
Date: Tue, 19 Aug 2003

Conference Name: SIAM Conference on Geometric Design & Computing
Location: Grand Hyatt Seattle, Seattle, Washington
Dates: November 9-13, 2003

The program schedule and registration information for this conference is now available at: http://www.siam.org/meetings/gd03/

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

---

From: Kirsten Wilden <wilden@siam.org>
Subject: SIAM Conference on Mathematics for Industry
Date: Wed, 03 Sep 2003

Subject: SIAM Conference on Mathematics for Industry: Challenges and Frontiers
Registration and Hotel Deadlines

Conference Registration and Hotel Deadlines are fast approaching!

Conference Name: SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI03)

Location: The Metropolitan Hotel, Toronto, Canada

Dates: October 13-15, 2003

Conference and Hotel Registration is now available at http://www.siam.org/meetings/mi03/.

Deadlines

Conference Registration Deadline: Monday, September 15, 2003
Hotel Registration Deadline: Wednesday, October 1, 2003

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

From: magrijn <magrijn.secsup@tip.nl>
Subject: Contents: Mathematics of Control, Signals, and Systems
Date: Wed, 27 Aug 2003

Mathematics of Control, Signals, and Systems 2003 Vol. 16, No. 1
Table of Contents

Controllability of one spin and two interacting spins
D. D'Alessandro

Orthogonal embeddings of linear time-varying systems
A. Feintuch

Backstepping in infinite dimension for a class of parabolic distributed parameter systems
D.M. Boskovic, A. Balogh and M. Krstic

The Kleinman iteration for nonstabilizable systems
P. Benner, V. Hernandez and A. Pastor

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

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

Address for submissions by email or regular mail:
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CWI
P.O.Box 94079
1090 GB Amsterdam
The Netherlands
Email mcss@cwi.nl

Eduardo Sontag and Jan van Schuppen (Editors)

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

IPNet Digest Volume 10, Number 09 October 1, 2003

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

Today's Topics:
SIAM Conference on Imaging Sciences
Inverse Problems Workshop at Leeds
Royal Statistical Society Meeting on Inverse Problems
Table of Contents: Inverse Problems
Table of Contents: Linear Algebra and Its Applications

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

Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Chris Johnson <crj@sci.utah.edu>
Subject: SIAM Conference on Imaging Sciences 2004
Date: Fri, 12 Sep 2003

SIAM Conference on Imaging Sciences 2004

Salt Lake City, UT
May 3-5, 2004

http://www.siam.org/meetings/is04/

About the Conference

Current developments in the technology of imaging have led to an explosive growth in the interdisciplinary field of imaging science. With the advent of new devices capable of seeing objects and structures not previously imagined, the reach of science and medicine has been extended in a multitude of different ways. The impact of this technology has been to generate new challenges associated with the problems of formation, acquisition, compression, transmission, and analysis of images. By their very nature, these challenges cut across the disciplines of physics, engineering, mathematics, biology, medicine, and statistics. While the primary purpose of this conference is to focus on mathematical issues, the biomedical aspects of imaging will also play an important role.

PROGRAM COMMITTEE CO-CHAIRS

Chris Johnson, University of Utah
Ross Whitaker, University of Utah

PROGRAM COMMITTEE (partial list)

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Steven Haker, Harvard University
Stanley Osher, University of California, Los Angeles
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Alan J Van Nevel, Naval Air Warfare Center, Weapons Division
Joachim Weickert, Saarland University, Germany
Anthony Yezzi, Georgia Institute of Technology

CONFERENCE THEMES

Image acquisition
Image reconstruction and restoration
Image storage, compression, and retrieval
Image coding and transmission
PDEs in image filtering and processing
Image registration and warping
Image modeling and analysis
Statistical aspects of imaging
Wavelets and multiscale analysis
Multidimensional imaging sciences
Inverse problems in imaging sciences
Mathematics of visualization
Biomedical imaging
Applications

From: Daniel Lesnic <amt5ld@maths.leeds.ac.uk>
Subject: Inverse Problems Workshop at Leeds
Date: Mon, 22 Sep 2003

An Inverse Problems Workshop will be held in
the Department of Applied Mathematics at the University of Leeds on
3rd November 2003.

Programme of talks:

14.05 - 14.55 S. Chandler-Wilde (University of Reading) - "Time domain inverse scattering by rough surfaces".

15.05 - 15.55 S. Arridge (University College London) - "Inverse problems in optical tomography".

16.00 - 16.15 Tea Break

16.20 - 16.55 A.S. Blagovestchenskii (St.Petersburg, Russia) - "Solutions to the wave equation with sources at infinity".

If you have any enquiries please contact:
Daniel Lesnic
  tel: 0113-3435181, e-mail: amt5ld@maths.leeds.ac.uk,
  Room 8.22g, School of Mathematics, or
Lionel Elliott
  tel: 0113-3435121, e-mail: lionel@maths.leeds.ac.uk,
  Room 8.22e, School of Mathematics.

From: Guy Nason <g.p.nason@bristol.ac.uk>

Subject: Royal Statistical Society Meeting on Inverse Problems: London/December
Date: Tue, 30 Sep 2003

ANNOUNCE: ORDINARY HALF-DAY MEETING ORGANIZED BY THE RESEARCH SECTION of the RSS.

Wednesday 10th December, 2pm at the RSS (Tea during the meeting)

Paper: IAIN M JOHNSTONE (Stanford University),
GERARD KERKYACHARIAN (Universite de Paris X),
DOMINIQUE PICARD (Universite de Paris VI-VII) and
MARC RAIMONDO (University of Sydney)

Wavelet deconvolution in a periodic setting

Paper: PATRICK J WOLFE, SIMON J GODSILL and
WEE-JING NG (University of Cambridge)

Bayesian variable selection and regularisation for time-frequency surface estimation

Paper: HAARIO, H., LAINE, M., (University of Helsinki),
LEHTINEN, M. (University of Oulu), SAKSMAN, E. (University of Jyvaskyla)
and TAMMINEN, J. (Finnish Meterological Institute)

MCMC methods for high dimensional inversion in remote sensing

Paper: DAN CORNFORD, LEHEL CSATO, DAVID J EVANS, and
MANFRED OPPER (Aston University)

Bayesian analysis of the scatterometer wind retrieval inverse problem:
some new approaches.

For more details please see

http://www.stats.bris.ac.uk/~magpn/RS/inverseproblems.html

The meeting will take place at the Royal Statistical Society, 12 Errol Street, London EC1Y 8LX
(nearest underground stations are Old Street, Moorgate and Barbican). Tel: +44 (0)20 7638 8998

Guy Nason
Hon Secretary, Research Section, RSS

Research Section Web page

http://www.stats.bris.ac.uk/~magpn/RS

From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents list for Inverse Problems, vol. 19, issue 5, Oct. 2003
Date: Wed, 24 Sep 2003

Inverse Problems October 2003 Volume 19, Issue 5

All articles are free for 30 days after publication on the web. This issue is available at: http://stacks.iop.org/0266-5611/19/i=5

PAPERS

Anisotropic inverse problems in two dimensions Z Sun and G Uhlmann

Experimental design for outflow experiments based on a multi-level identification method for material laws S Bitterlich and P Knabner

Persistent angular structure: new insights from diffusion magnetic resonance imaging data K M Jansons and D C Alexander

Non-stationary magnetoencephalography by Bayesian filtering of dipole models E Somersalo, A Voutilainen and J P Kaipio

Exponentially growing solutions, multilayered anisotropic material and the enclosure method M Ikehata

Anisotropic resistivity inversion
C C Pain, J V Herwanger, J H Saunders, M H Worthington and C R E de Oliveira
(This article features multimedia enhancements in the online journal)

True amplitude wave equation migration arising from true amplitude one-way wave equations Y Zhang, G Zhang and N Bleistein

The point source method for reconstructing an inclusion from boundary measurements in electrical impedance tomography and acoustic scattering K Erhard and R Potthast

Variationally constrained numerical solution of electrical impedance tomography L Borcea, G A Gray and Y Zhang

The solvability conditions for the inverse eigenvalue problem of Hermitian and generalized skew-Hamiltonian matrices and its approximation Z-j Bai

The factorization method in inverse scattering from periodic structures
T Arens and A Kirsch

Uniqueness and convergence of conductivity image reconstruction in magnetic resonance electrical impedance tomography
Y J Kim, O Kwon, J K Seo and E J Woo

Regularized inversion of intergral transformations of Mellin convolution type V V Kryzhniy

Submitted by: Elizabeth Martin, Senior Production Editor
Inverse Problems,
Institute of Physics Publishing
Dirac House, Temple Back,
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E-mail: liz.martin@iop.org WWW: http://www.iop.org

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Mon, 15 Sep 2003

Linear Algebra and its Applications Nov 1 2003 Vol. 373
Table of Contents

Combinatorial Matrix Theory Conference (Pohang, 2002)
Pohang, South Korea, 14 January - 17 January 2002
Edited by S.-G. Hwang, A.R. Kraeuter, B.L. Shader and J.-Y. Shao

Special Issue on the Combinatorial Matrix Theory Conference
Suk-Geun Hwang, Arnold R. Krauter, Bryan L. Shader, and Jia-Yu Shao

A note on limit points for algebraic connectivity
Steve Kirkland

Matrix completion problems for pairs of related classes of matrices
Leslie Hogben

On graphs with algebraic connectivity equal to minimum edge density
Shaun M. Fallat, Steve Kirkland and Sukanta Pati

Linear preservers and diagonal hypergraphs Richard A. Brualdi

A note on k-primitive directed graphs
LeRoy B. Beasley and Steve Kirkland

The linear algebra of the k-Fibonacci matrix
Gwang-Yeon Lee and Jin-Soo Kim

Matrices determined by a linear recurrence relation among entries
Gi-Sang Cheon, Suk-Geun Hwang, Seog-Hoon Rim and Seok-Zun Song

Linear criteria for lifting automorphisms of elementary abelian regular coverings Shao-Fei Du, Jin Ho Kwak and Ming-Yao Xu

An approach to solving Ak=J-I Yaokun Wu and Qiao Li

Basic matrices Miroslav Fiedler

A lower bound on the maximum permanent in [Lambda]nk
Ian M. Wanless

Generalized exponents of boolean matrices Bolian Liu

On k-hypertournament matrices Youngmee Koh and Sangwook Ree

Extremes of permanents of (0,1)-matrices
Seok-Zun Song, Suk-Geun Hwang, Seog-Hoon Rim and Gi-Sang Cheon

Sparse orthogonal matrices Gi-Sang Cheon, Suk-Geun Hwang, Seog-Hoon Rim, Bryan L. Shader and Seok-Zun Song

Number of nonzero entries of S2NS matrices and matrices with signed generalized inverses Jia-Yu Shao, Jin-Ling He and Hai-Ying Shan

Which graphs are determined by their spectrum?
Edwin R. van Dam and Willem H. Haemers

Asymptotic enumeration of 0-1 matrices with equal row sums and equal column sums Brendan D. McKay and Xiaoji Wang

Factorizations of matrices over semirings
Han Hyuk Cho and Suh-Ryung Kim

The maximal determinant and subdeterminants of +/-1 matrices
Jennifer Seberry, Tianbing Xia, Christos Koukouvinos and Marilena Mitrouli

Inverse eigenvalue problems and lists of multiplicities of eigenvalues for matrices whose graph is a tree: the case of generalized stars and double generalized stars
Charles R. Johnson, Antonio Leal Duarte and Carlos M. Saiago

http://www.sciencedirect.com/science/issue/5653-2003-996269999-452969

Linear Algebra and its Applications Nov. 15, 2003 Vol. 374
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Accurate ordering of eigenvectors and singular vectors without eigenvalues and singular values K. V. Fernando

Total dilations II Jean-Christophe Bourin

The isometries and the G-invariance of certain seminorms
Boris Lavri

Commutative algebras of rational function matrices as endomorphisms of Kronecker modules I Frank Okoh and Frank Zorzitto

Commutative algebras of rational function matrices as endomorphisms of Kronecker modules II Frank Okoh and Frank Zorzitto

On the eigenproblem of matrices over distributive lattices
Yijia Tan

On vector spaces with distinguished subspaces and redundant base
Francesco Barioli, Clorinda De Vivo and Claudia Metelli

Index of parabolic and seaweed subalgebras of
Alexander Dvorsky

On the sensitivity of multiple eigenvalues of nonsymmetric matrix pencils Huiqing Xie and Hua Dai

Characterizations of classes of stable matrices
A. Bhaya, E. Kaszkurewicz and R. Santos

D-optimal weighing designs for n[equiv]-1 mod4 objects and a large number of weighings
Bernardo M. Abrego, Silvia Fernandez-Merchant, Michael G. Neubauer and William Watkins

Low rank perturbations and the spectrum of a tridiagonal sign pattern
L. Elsner, D. D. Olesky and P. van den Driessche

The polynomial numerical hulls of Jordan blocks and related matrices

Vance Faber, Anne Greenbaum and Donald E. Marshall

Equivalence constants for certain matrix norms Bao Qi Feng

Elementary divisors of tensor products and p-ranks of binomial matrices Xiang-Dong Hou

Relative volumes and minors in monomial subrings
Cesar A. Escobar, Jose Martinez-Bernal and Rafael H. Villarreal

Finite linear spaces admitting a projective group PSU(3,q) with q even Weijun Liu

On spectral integral variations of mixed graphs
Yi-Zheng Fan

Simple criteria for nonsingular H-matrices
Tai-Bin Gan and Ting-Zhu Huang

http://www.sciencedirect.com/science/issue/5653-2003-996259999-457894

Note:
These papers and 90 accepted LAA articles in press are now available to subscribers of Science Direct at http://www.sciencedirect.com/ .

Submitted by: Hans Schneider
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------- end -------

IPNet Digest Volume 10, Number 10 October 31, 2003

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

Today's Topics:
SPIE Conference on Image Reconstruction from Incomplete Data
Workshop on Modeling of Water Flow and Contaminant Transport
SIAM Conference on the Life Sciences
ACM-SIAM Symposium on Discrete Algorithms
SIAM International Conference on Numerical Combustion
New book on Multi-scale Image Analysis
Table of Contents: Inverse Problems in Engineering

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Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Russell Luke <rluke@cecm.sfu.ca>
Subject: SPIE Conference on Image Reconstruction from Incomplete Data
Date: Tue, 28 Oct 2003

Conference on Image Reconstruction from Incomplete Data III
Part of the SPIE 49th Annual Meeting
2-6 August 2004
Colorado Convention Center
Denver, Colorado USA
http://spie.org/Conferences/Calls/04/am/conferences/index.cfm?fuseaction=AM320

Conference Chairs: Philip J. Bones, Univ. of Canterbury (New Zealand); Michael A. Fiddy, UNC Charlotte (North Carolina); Rick P. Millane, Univ. of Canterbury (New Zealand)

Program Committee

Yoram Bresler, Univ. of Illinois/Urbana Champaign;
Julian C. Christou, Univ. of California/Santa Cruz;
Christopher Dainty, Univ.Galway, Ireland;
Peter C. Doerschuk, Purdue Univ.;
James R. Fienup, U of Rochester;
Donald Fraser, Univ. of New South Wales (Australia);
Richard G. Lane, Univ. of Canterbury (New Zealand);
D. Russell Luke, Simon Fraser University
Robert V. McGahan, Air Force Research Lab.;
Alok Mitra, University of Auckland, N.Z.
Rocco Pierri, Seconda Univ.degli Studi di Napoli (Italy);
Marc Saillard, CNRS (France);
Michael B.Silevitch, Northeastern Univ.;
Eric Thiebaut, Univ. Claude Bernard Lyon I (France);
Markus E. Testorf, Dartmouth College
Jong Ye, Philips Research USA

The theme of this conference is methods and algorithms for reconstructing images of a physical system or object from

remotely-sensed data, in which the data are incomplete (in the sense that they do not, by themselves, allow a direct computation of a high-fidelity image). It is therefore necessary to incorporate other information or constraints to obtain a useful solution. The design of effective and efficient algorithms for using the different kinds of available data and constraints to obtain a solution is of primary importance in these kinds of problems. In many, although not all, of these problems the data are related to a wavefield that carries information concerning the object, i.e. they often involve scattering or diffraction. Example technical areas include phase retrieval, deconvolution, inverse scattering, regularization, and imaging through turbulence. Example application areas include radar imaging, medical imaging (ultrasonic, x-ray CT, MRI, optical diffusion and optical coherence, etc.), laser imaging, optical and radio astronomy, microscopy, crystallography, geophysical imaging (atmospheric profiling, ocean acoustic, seismic, etc.), and signal design. The applications and methods used are diverse, and we invite contributions from researchers in any discipline who make use of these kind of techniques.

Topics may include, but are not limited to:

phase retrieval superresolution and deconvolution
image and system modeling and regularization
probabilistic and Bayesian methods for inverse problems
optimization methods for image recovery
matched filtering
sampling and aliasing
computationally efficient algorithms
wavefield propagation
radar and inverse scattering
imaging of, or through, turbulent, refracting, or highly scattering media
profile inversion
applications in remote sensing, medicine, biology, geophysics, etc.

For those who are interested, various real data sets are available for evaluating inverse scattering and phase retrieval algorithms. It is our intention to have at least one session during the meeting devoted to processing real data, thereby providing participants with a means to compare their algorithms with those of others. The gateway to a description of these data and the data sets themselves can be found on http://opticscenter.uncc.edu/SPIE_IRID3.html

Submitted by: Russell Luke
Department of Mathematics
Simon Fraser University
Burnaby, British Columbia V5A 1S6
CANADA
rluke@cecm.sfu.ca

From: Water Resources Research Center <wrrc@hawaii.edu>
Subject: Applied Modeling Workshop in Honolulu
Date: Wed, 22 Oct 2003

Rien van Genuchten and Jirka Simunek of the George Brown Salinity Laboratory will be offering a 2-day workshop entitled "Applied Modeling of Water Flow and Contaminant Transport in Soils and Groundwater" at the University of Hawaii on December 15 and 16, 2003. The Water Resources Research Center at the University of Hawaii is hosting this event.

Details about the workshop can be found at:

http://www.wrrc.hawaii.edu/WRRCconfflyr.pdf

Dr. van Genuchten provided your e-mail address to us with the hope of bringing this information to the attention of yourself or others in your organization. For further details, please contact myself (cray@hawaii.edu)
or Philip Moravcik at the Water Resources Research Center (morav@hawaii.edu). Lodging and parking information will be provided upon request.

Sincerely,
Chittaranjan Ray

Submitted by:
Chittaranjan Ray, Associate Professor | Phone : (808) 956-9652
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Water Resources Research Center | Fax : (808) 956-5014/9660 (CEE)
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Honolulu, HI 96822 | http://www.eng.hawaii.edu/~ray

From: "Darrell Ross" <ross@siam.org>
Subject: Call for Papers: SIAM Conference on the Life Sciences
Date: Thu, 02 Oct 2003

SIAM Conference on the Life Sciences (LS04)
http://www.siam.org/meetings/ls04/

July 11-14, 2004
(Held in conjuntion with SIAM AN04)
Co-Chairs: Carson C. Chow, University of Pittsburgh and Tamar Schlick, New York University
Doubletree Hotel, Portland-Lloyd Center
Portland, Oregon

Call for Papers is now Open!

DEADLINE DATES
Minisymposium proposals: December 11, 2003
Minisymposium abstracts and contributed abstracts: January 8, 2004
Contributed papers in lecture format: January 8, 200

For more information please visit:
http://www.siam.org/meetings/ls04/

Submitted by:
Darrell Ross SIAM, Conference Program Manager
Conference Web Master
ross@siam.org

From: Kirsten Wilden <wilden@siam.org>
Subject: ACM-SIAM Symposium on Discrete Algorithms
Date: Wed, 08 Oct 2003

Subject: ACM-SIAM Symposium on Discrete Algorithms (SODA04)

Conference Name: ACM-SIAM Symposium on Discrete Algorithms (SODA04)

Conference Program Chair: Ian Munro, University of Waterloo, Canada

Location: Astor Crowne Plaza Hotel, New Orleans, Lousiana

Dates: January 11-13, 2004

Pre-registration is now available at
http://www.siam.org/meetings/da04/. The pre-registration deadline is
December 15, 2003.

The preliminary program for this symposium is also available at
http://www.siam.org/meetings/da04/.

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

From: Kirsten Wilden <wilden@siam.org>
Subject: International Conference on Numerical Combustion
Date: Fri, 24 Oct 2003

Subject: International Conference on Numerical Combustion (NC04)
          CFP Deadlines

Conference Name: International Conference on Numerical Combustion (NC04)

Location: Hilton Sedona Resort & Spa, Sedona, Arizona

Dates: May 9-12, 2004

The Call for Presentations for this conference is available at:
  http://www.siam.org/meetings/nc04/

Deadlines

Minisymposium proposals: November 5, 2003

Minisymposium abstracts: December 3, 2003

Contributed abstracts in lecture or poster format: December 3, 2003

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

From: "Haar Romenij, B.M. ter" <B.M.terhaarRomeny@tue.nl>
Subject: New book on Multi-scale Image Analysis
Date: Thu, 9 Oct 2003

New book:

Front-End Vision and Multi-Scale Image Analysis: Multi-scale computer
vision theory and Applications, written in Mathematica

by Bart M. ter Haar Romeny, Eindhoven University of Technology, Dept.
of Biomedical Engineering, Biomedical Imaging and Informatics, The
Netherlands

Book Series: COMPUTATIONAL IMAGING AND VISION : Volume 27, ISBN 1-4020-1503-8 (hardbound), ISBN 1-4020-1507-0 (paperback).

A breakthrough in interactive teaching of multi-scale methods for image analysis. This book contains all chapters as Mathematica notebook files on an enclosed CD-ROM.

Front-End Vision and Multi-Scale Image Analysis is a tutorial in multi-scale methods for computer vision and image processing. It builds on the cross fertilization between human visual perception and multi-scale computer vision (`scale-space') theory and applications. The multi-scale strategies recognized in the first stages of the human visual system are carefully examined, and taken as inspiration for the many geometric methods discussed. All chapters are written in Mathematica, a spectacular high-level language for symbolic and numerical manipulations.

The book presents a new and effective approach to quickly mastering the mathematics of computer vision and image analysis. The typically short code is given for every topic discussed, and invites the reader to spend many fascinating hours `playing' with computer vision.

Front-End Vision and Multi-Scale Image Analysis is intended for undergraduate and graduate students, and all with an interest in computer vision, medical imaging, and human visual perception.

See http://www.kap.nl/prod/b/1-4020-1507-0.
Special reduced price for educational use (6 copies or more).

Submitted by: Prof. Bart M. ter Haar Romeny, PhD
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From: "James Beck" <jamesverebeck@comcast.net>
Subject: Oct. Inverse Prob in Eng
Date: Mon, 27 Oct 2003

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IPNet Digest Volume 10, Number 11 December 1, 2003

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

Today's Topics:
International Workshop on Computer Vision
Summer School in Math Geophysics & Uncertainty in Earth Models
SIAM Conference on Discrete Mathematics
Postdoctoral Research Position at Montana State University
Postdoctoral Position at Rensselaer Polytechnic Institute
Special LAA Issue in honor of Pauline van den Driessch
Table of Contents: Inverse Problems
Table of Contents: Inverse Problems in Engineering
Table of Contents: Mathematics of Control, Signals, and Systems
Table of Contents: Linear Algebra and Its Applications

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

Information about IPNet:
http://www.mth.msu.edu/ipnet
Mail to ipnet-request@math.msu.edu

From: Ali Mohammad-Djafari <djafari@lss.supelec.fr>
Subject: International Workshop on Computer Vision
Date: Fri, 21 Nov 2003

First Announcement
INTERNATIONAL WORKSHOP ON COMPUTER VISION

Organization: Institute for Studies in Theoretical Physics and Mathematics (IPM) (www.ipm.ac.ir), Tehran, Iran.

Date: April 26-30, 2004
Location: IPM, Tehran, Iran.

Oraganizers:
A. Mohammad-Djafari (Supelec, Gif-sur-Yvette, France), and
Mehrdad Shahshahani (IPM, Tehran, Iran).

Confirmed list of Invited Speakers:
P. Frosini (Universita di Bologna, Bologna, Italy),
A. Hero (University of Michigan, Ann Arbor, Michigan, USA),
A. Mohammad-Djafari (CNRS, Supelec, Gif-sur-Yvette, France),
M. Shahshahani (IPM, Tehran, Iran),
J. Ph. Thiran (EPFL, Lausanne, Switzerland).

Scope:
New trends and activities in computer vision and applications. Image analysis and understanding. Statistical and topological techniques in image segmentation, shape classification, detection of objects, and pattern recognition. Applications to robotics, vehicular motion, medicine etc.

Call for Papers:
Papers will be accepted for presentation at the Workshop subject to approval by the Scientific Committee. Please send submissions (extended abstract or full paper) electronically (preferably in PDF format) to A.

Mohammad-Djafari (djafari@lss.supelec.fr) and Mehrdad Shahshahani (mehrdads@ipm.ir).

Deadline for Submissions: February 28, 2004.

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website: http://djafari.free.fr/CompVision1.html

Submitted by: Ali MOHAMMAD-DJAFARI
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From: Roel Snieder <rsnieder@mines.edu>
Subject: Announcement of summer school
Date: Mon, 24 Nov 2003

Announcement

Summer School on Mathematical Geophysics and Uncertainty in Earth Models

June 14-25, 2004
Colorado School of Mines, Golden, Colorado

Registration deadline: February 6, 2004.

Scope of the School

The goal of this interdisciplinary school is to expose graduate students and researchers from mathematics and geophysics to key issues in mathematical modeling and uncertainty analysis in geophysics. The program includes tutorials as well as presentations on current research that are of academic and industrial interest.

The school will also define collaborative research directions between mathematics and the geosciences in the quantification of uncertainty in geophysical imaging and inversion. The summer school is financially supported by the program for Collaborations in Mathematical Geosciences (CMG) of the National Science Foundation.

Topics of the School

Lectures on inverse problems, statistical inference, optimization, numerical modeling in geophysics, wave propagation, seismological imaging, and reservoir simulation. Presentations include current research in regularization of inverse problems, theory and applications of optimization, uncertainty analysis in seismological imaging, and physical constraints on inverse problems. A visit to the visualization center of the National Center of Atmospheric Research and a local geological field trip are part of the program.

Target Audience

The school will bring together graduate students, post-docs, and senior researchers in mathematics or the geosciences. For logistic reasons the number of participants is limited. About 40 students may receive financial support to attend the school. Speakers will be by invitation only. There will be an opportunity to present research through poster presentations.

Organizing Committee

-Roel Snieder (Colorado School of Mines)
-Luis Tenorio (Colorado School of Mines)
-Eldad Haber (Emory University)
-Alberto Malinverno (Schlumberger-Doll Research)
-Mike Ritzwoller (University of Colorado at Boulder)

Speakers

-Brian Borchers (New Mexico Tech)
-Chris Farmer (Schlumberger Abingdon Technology Centre)
-Omar Ghattas (Carnegie Mellon University)
-Alexandra Newman (Colorado School of Mines)
-Doug Oldenburg (University of British Columbia)
-Malcolm Sambridge (Australian National University)
-Philip Stark (University of California at Berkeley)
-Terry Young (Colorado School of Mines)
-Brian Kennett (Australian National University)
-Anthony Dahlen (Princeton University)
-Alan Levander (Rice University)
-Henning Omre (Norwegian University for Science and Technology)
-George Papanicolaou (Stanford University)
-John Scales (Colorado School of Mines)
-Bill Symes (Rice University)
-Jeannot Trampert (Utrecht University)

For more information and registration visit:

http://www.mines.edu/outreach/cont_ed/summerschool/uncertainty.html

A pdf-file with the colour-version of the flyer can be downloaded from:

http://www.mines.edu/~rsnieder/summer_school_flyer.pdf

Contact person:

Roel Snieder, rsnieder@mines.edu

Submitted by: Prof. R.K. Snieder, Dept. of Geophysics
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From: Kirsten Wilden <wilden@siam.org>
Subject: SIAM Conference on Discrete Mathematics
Date: Tue, 18 Nov 2003

Subject: SIAM Conference on Discrete Mathematics (DM04) **CFP Deadlines**

Conference Name: SIAM Conference on Discrete Mathematics (DM04)

Location: Loews Vanderbilt Plaza Hotel, Nashville, TN

Dates: June 13-16, 2004

Invited Plenary Speakers:
Jennifer Chayes, Microsoft Research
Martin Grötschel, Konrad-Zuse-Zentrum für Informationstechnik Berlin (ZIB),
DFG-Forschungszentrum "Mathematik für Schlüsseltechnologien," and Technische Universität Berlin, Germany
Jon Kleinberg, Cornell University
Tom Leighton, Massachusetts Institute of Technology and Akamai Technologies, Inc.
Eugene Myers, University of California, Berkeley
Paul Seymour, Princeton University
Richard Stanley, Massachusetts Institute of Technology
Alexander Vardy, University of California, San Diego

The Call for Presentations for this conference is available at:
http://www.siam.org/meetings/dm04/

Deadlines Approaching!

Minisymposium proposals: December 11, 2003

Minisymposium abstracts and contributed abstracts: January 8, 2004

Contributed papers in lecture format: January 8, 2004

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

From: Curt Vogel <vogel@math.montana.edu>
Subject: Postdoctoral Research Position at Montana State University
Date: Sun, 30 Nov 2003

Postdoctoral Research Position at Montana State University

The Department of Mathematical Sciences at Montana State University invites applications for a postdoctoral research position in computational and applied mathematics with applications to adaptive optics. Initial appointment is for one year, with the possibility of extension to a second year according to mutual agreement. The position is grant-funded, and funding is secure for the position for a term of two years.

Salary is $41,000 per year, plus benefits and travel. Screening begins immediately and will continue until the position is filled. The starting date is negotiable, but the preferred date is June 1, 2004, or sooner.

The position requires a PhD in Applied or Computational Mathematics, Optical Sciences, or a related field, to be completed by the start date. Experience programming in MATLAB or C++ is also required. A working knowledge of Fourier optics, adaptive optics, atmospheric wave propagation, and mathematical imaging is highly desirable. Familiarity with control theory and numerical solution methods for partial

differential equations is also desired.

The goals of the research project include development of analytical tools and computational algorithms for modeling, simulation, and control in extreme adaptive optics, in multiconjugate adaptive optics, and also possibly in vision science. For more information on the position, consult the web at

http://www.math.montana.edu/~vogel/Postdoc/

Montana State University has an enrollment of 12,000 students. It is located in Bozeman, a town of 30,000 located in the mountains of southwestern Montana. Outdoor activities like downhill and cross country skiing, hiking, mountain biking, and trout fishing are within a few minutes from town, and Yellowstone National Park is only 90 miles away. The Mathematical Sciences Department has active research groups in the areas of computational mathematics, applied mathematics, mathematical biology, statistics, and dynamical systems. Faculty members actively participate in interdisciplinary research efforts with engineering and physical science departments across the University.

Screening of applications begins immediately, and will continue until the position is filled. Send curriculum vita, a detailed description of qualifications and research interests, and three letters of recommendation to: Curtis R. Vogel, Dept. of Mathematical Sciences, Montana State University, Bozeman, MT 59717-2400, vogel@math.montana.edu. E-mail applications are prefered. ADA/AA/EO/Vet. Pref.

From: ipowner@math.msu.edu
Subject: Postdoctoral Position at Rensselaer Polytechnic Institute
Date: Mon, 1 Dec 2003

POSTDOCTORAL POSITION
Department of Mathematical Sciences

Rensselaer Polytechnic Institute is pleased to announce the availability of a postdoctoral position in applied mathematics and/or mechanical engineering with emphasis on the theoretical results and/or algorithm development for elastography problems. This position is anticipated to begin as soon as possible but could start as late as February 2004. The position is for one year, renewable for an additional year. Travel support to attend conferences will be provided.

Applicants should send a letter of application, a curriculum vita, a description of research interests, and three letters of recommendation sent directly to: Alice Baker, Department of Mathematical Sciences, Rensselaer Polytechnic Institute, 110 8th Street, Troy, NY 12180. Inquiries should be sent to Professor Joyce McLaughlin (mclanj@rpi.edu) or Professor Antoinette Maniatty (maniaa@rpi.edu)

Review of applications will begin one month after the posting of this announcement and will continue until the position is filled.

Rensselaer is an Equal Opportunity/Affirmative Action Employer. Women and Minorities are strongly encouraged to apply.

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA Special Issue
Date: Thu, 20 Nov

LINEAR ALGEBRA AND ITS APPLICATIONS
Special issue in honor of Pauline van den Driessche

Linear Algebra and Its Applications is pleased to announce a special issue in honor of Professor Pauline van den Driessche in recognition of her many important contributions to linear algebra and mathematical biology, and on the occasion of her 65th birthday.

The deadline for submission of papers is October 31, 2004. Papers are solicited for the special issue within the scope of LAA, especially those that overlap with the research interests of Pauline van den Driessche. Papers for submission should be sent to any of the four special editors, and will be subject to normal refereeing procedures according to LAA standards:

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From: "Elizabeth Martin" <liz.martin@iop.org>
Subject: Contents list for Inverse Problems, vol 19, December 2003

Date: Wed, 12 Nov 2003

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Submitted by Elizabeth Martin, Senior Production Editor
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From: "James Beck" <jamesverebeck@comcast.net>
Subject: IPIE Dec 2003
Date: Fri, 28 Nov 2003

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Submitted by: Jim Beck
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From: magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Mon, 3 Nov 2003

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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

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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Wed, 5 Nov 2003

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This issue and over 60 articles in press are now available on Science Direct, http://www.sciencedirect.com/

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