Contents

IPNet Digest Volume 6, Number 01 January 31, 1999

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

Today's Topics:

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

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

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: Computational Mathematics driven by Industrial Applications
Date: Sun, 31 Jan 1999

A Course on

"Computational Mathematics driven by Industrial Applications"

is planned by CIME (International Mathematical Summer Center) in Martina Franca (Italy) during June 21-27, 1999. The Directors of the Course are Vincenzo Capasso (Univ. of Milano), Heinz Engl (Univ. of Linz), and Jacques Periaux (Dassault Aviation).

COURSES

The following sets of 5/6 hours lectures each in English will be offered

1. Paths, trees and flows: graph optimization problems with industrial applications,
by Prof. Rainer BURKARD (Technische Universitaet Graz)

2. New computational concepts, adaptive differential equation solvers and virtual labs,
by Prof. Peter DEUFLHARD (Konrad Zuse Zentrum Berlin)

3. Computational methods for aerodynamic analysis and design,
by Prof. Antony JAMESON (Stanford University)

4. Mathematical problems in industry,
by Jacques Luis LIONS (College de France et Dassault Aviation, Paris)

5. Wavelets transform and cosine transform in signal and image processing,
by Gilbert STRANG

SEMINARS

A set of two hours seminars in English will be offered too

a. Mathematics of the crystallization process of polymers,
by Vincenzo CAPASSO

b. Inverse problems: regularization methods and applications in industry,
by Heinz ENGL

c. Mathematics of Glass,
by Robert MATTHEIJ (Technische Universitaet Eindhoven)

d. Combining game theory and genetic algorithms for solving multiobjective shape optimization problems in aerodynamics Engineering,
by Jacques PERIAUX.

For details about contents and references please refer to CIME at the address below.

LECTURE NOTES

will be available as draft at the Course and will appear soon after in the
CIME subSeries of the Springer-Verlag Lecture Notes in Mathematics.

APPLICATIONS

Those who want to attend should fill the following application form to

CIME Foundation
% Dipartimento di Matematica "U.Dini"
Viale Morgagni 67/a
50137 FIRENZE, Italy

tel. +39 055434975 or +39 0554237123
fax +39 055434975

e-mail cime@udini.math.unifi.it

==========

Title of the Course .....

Family name.....
First Name.....
Age.....
Gender.....

Mailing Address.....
Fax.....
e-mail.....

Present Professional Position.....
Current Interest in the field of the session.....

If you apply for a grant indicate :

Citizenship.....
Residence in the last one year.....

==========

For info's visit http://www.math.unifi.it/cime/welcome.to.cime

not later than April 30, 1999.

NO FEES are due.

An important consideration in the acceptance of the application is the scientific relevance of the Course to the field of interest of the applicant.

Applicants are requested therefore to submit along with their application, a scientific curriculum and a letter of recommendation. There is a chance of having your expenses partially covered by the European Community (EU) . The action of the programme is intended to support young scientists up to 35 years old. Researchers should be citizen of a member state of the EU or reside in such a state for at least one year. Please quote in the application the need of support and conditions for eligibility.

SITE

Martina Franca is a delightful baroque town made of white houses of Apulian spontaneous architecture. It is the major and aristocratic centre of the "Murgia dei Trulli" standing on a hill which dominates the well known Itria Valley , which is spotted with "trulli" typical dry stone houses of conical shape which go back to the 15th century. A masterpiece of the baroque architecture is the ducal palace where the Course will be hosted. Martina Franca belongs to the province of Taranto, one of the major centres of Magna Grecia, particularly devoted to Mathematics. Taranto houses an outstanding museum of Magna Grecia with fabulous collections of gold manufactures.

LODGING

Special rates are offered by Park Hotel San Michele (four star hotel):

Lit. 70.000 full board for accommodation in double room
Lit 100.000 full board for accommodation in single room

Participants are requested to made their reservations directly at the hotel (CIME may reimburse selected participants - see above)

tel +39 0804807053
fax +39 0804808895

Prof.Dr.Heinz W. Engl E-Mail: engl@indmath.uni-linz.ac.at
Institut fuer Industriemathematik secretary:nikolaus@indmath.uni-linz.ac.at

Johannes-Kepler-Universitaet
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Oesterreich / Austria
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Fax:ext. 855, in Dean's affairs:ext.3225
home phone: +43-(0)732-245518
World Wide Web: http://www.indmath.uni-linz.ac.at/

From: Lothar Reichel <reichel@mcs.kent.edu>
Subject: Conference in honor of Richard Varga
Date: Fri, 18 Dec 1998

MATHEMATICAL JOURNEY THROUGH ANALYSIS,
MATRIX THEORY AND SCIENTIFIC COMPUTATION:

a conference on the occasion of
Richard S. Varga's 70th birthday

The meeting will take place at Kent State University on March 25-27, 1999, and will focus on the many research areas in which Richard Varga has made important contributions. The conference will provide an opportunity for researchers in these different yet related areas to exchange ideas. More than 30 speakers have already agreed to give presentations. A banquet dinner will be held on Friday, March 26. The journal Numerical Algorithms will publish a special issue dedicated to Richard Varga.

Further information about the conference is available at the web site

http://etna.mcs.kent.edy/~conference

If you are interested in participating in the conference or coming to the banquet, please notify Daniela Calvetti (dxc57@po.cwru.edu) or Lothar Reichel (reichel@mcs.kent.edu) as soon as possible. Your e-mail message should indicate whether you would like to

___ participate in the meeting,

___ present a talk at the meeting,

___ submit a paper to the special issue.

Please contact Daniela Calvetti or Lothar Reichel if you have any questions.

From: "Apartsyn A.S." <apartsyn@ISEM.SEI.IRK.RU>
Subject: Integral Models for Non-linear Dynamic Systems Identification
Date: Wed, 20 Jan 1999

Dear colleagues,

We are seeking partners to work together in the field of the treatment the Integral Models for Non-linear Dynamic Systems Identification. We hope to organize a type of Virtual International Research Group. "Virtual" means that in the beginning stage we can connect through Internet.

We have a lot of experience in the analytical and numerical

investigation, Computer Algebra systems, construction of approximate solutions of integral and differential equations, dynamic systems, modeling of the process of heat exchange. Experimenters are welcome especially.

http://isem.sei.irk.ru

Laboratory of Ill-posed
Problems of Computational Mathematics,
Institute of Energy Systems
Russian Academy of Sciences,
Irkutsk,
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phone: (+7 3952) 465 440
e-mails: apartsyn@isem.sei.irk.ru
(Anatoly S. Apartsyn, Ph.D., Head of Lab.)
sidorov@netscape.net
(Denis N. Sidorov, Ph.D. students,
www.angelfire.com/sd/denissidorovhpage)

From: "D. L. Snyder" <dls@essrl.wustl.edu>
Subject: Information-Theoretic Imaging
Date: Mon, 7 Dec 1998

Call for papers for a special issue of the IEEE Transactions on Information Theory on Information-Theoretic Imaging

The Transactions on Information Theory is soliciting original papers for a special issue to be published in 2000 on information-theoretic imaging.

The last decade has witnessed impressive advances in statistical imaging and in statistical, model-based image processing in general. Recent research has addressed two categories of problems: 1, novel applications of fundamental statistical and information theoretic principles to imaging; and 2, exploring optimal and sub-optimal methods for extracting information from intrinsically high dimensional image data. In the first category are topics such as hierarchical image modeling and representation,image compression and coding, minimax analysis, robustness analysis, learning theory, statistical pattern recognition and pattern matching, inference from compressed image-data, and fundamental performance bounds on estimation, detection, classification and compression. In the second category are topics such as approximation theory for multidimensional objects, multi-resolution data analysis, content based indexing of image databases, projection pursuit methods, and image reconstruction from incomplete and noisy data; for example, from magnitude-only Fourier data or tomographic projections. The first goal of this special issue is to publish original papers addressing fundamental theoretical and computational aspects of such problems and at the same time raising the awareness for such research within the information-theory community. The special issue will complement the upcoming Information Theory Workshop on Detection, Estimation, Classification and Imaging, to be held in Santa Fe, New Mexico, in February, 1999. A long-term goal is to build a broad, high-quality forum for addressing imaging problems of fundamental information-theoretic significance and to help bridge the current, significant gap that exists between emerging, advanced theoretical concepts and image processing practice.

Schedule:

First call for papers: November, 1998
Submission deadline: September 1, 1999
Notification of decisions: February, 2000
Publication: August, 2000

Manuscripts should be submitted by August 1, 1999
to the Guest Editor-in-Chief:

Donald L. Snyder
Department of Electrical Engineering, Box 1127
Washington University
One Brookings Drive
St. Louis, Missouri 63130-4899

The Guest Associate-Editors for the special issue will be:

Alfred O. Hero III
Dept. of Electrical Engineering and Computer Science
The University of Michigan
1301 Beal Avenue
Ann Arbor, MI 48109-2122

Pierre Moulin
University of Illinois at Urbana-Champaign
2265 Beckman Institute
405 North Mathews
Urbana, IL 61801

Jose M. F. Moura
Department of Electrical Engineering
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, Pennsylvania 15213-3890

Joseph A. O'Sullivan
Department of Electrical Engineering, Box 1127
Washington University
One Brookings Drive
St. Louis, Missouri 63130-4899

Contributed by: D. L. Snyder (dls@ee.wustl.edu)

From: Emanuele Salerno <salerno@iei.pi.cnr.it>
Subject: Special Issue, Real-Time Imaging, EXTENDED DEADLINE
Date: Thu, 7 Jan 1999

I hereby submit the following Call for Papers for a special issue of the journal Real-Time Imaging. Please note that the deadline for submission has been postponed from 31 October 1998 to 31 March 1999.

Best Regards
Emanuele Salerno

Real-Time Imaging
http://www.hbuk.co.uk/ap/journals/ri.htm

Special Issue on "Fast Energy-Minimization-Based Imaging and Vision Techniques"

EXTENDED DEADLINE

Call for Papers

Energy-minimization methods are powerful tools in all domains of imaging and computer vision. Many of them descend from Bayesian or variational approaches to solve the related inverse problems.

Many numerical algorithms implementing these methods have been developed in recent years for several applications, but, because of their exceedingly high computational complexity, their practical interest has been limited to those cases where real-time performance is not required. However, there are many applications for which the high quality of the solutions achievable with these methods is strongly desirable, and true real-time is not a strict constraint. Indeed, the term 'real-time' often has a relative meaning, depending on the application considered, the actual requirement being to have a 'reasonable' elapsed time. These considerations notwithstanding, the speed performance of many energy-minimization algorithms is at present not sufficient for most applications. On the other hand, the development of computing power both in dedicated and general-purpose hardware is about to enable us to take some of these techniques to practical usefulness. This justifies, from a practical point of view, the continued research interest in energy-minimization methods.

Two main strategies can be identified in order to face these problems. From an architectural point of view, an effort should be made to fully exploit existing architectures for the implementation of the algorithms, or to design special hardware best suited for particular tasks. From an algorithmic point of view, the search for new mathematical models and/or computational schemes should be directed towards a better tractability of the problems. Moreover, the generality of some approaches can be reduced to obtain algorithms that are either intrinsically less expensive or more suitable for particular high-performance machines.

All the contributions to solve (or approaching a solution of) one of the problems raised above are welcome to this special issue. A (not exhaustive) list of suggested sub-topics is the following:

1. Algorithmic aspects
   - 1.1 Mathematical models
   - 1.2 Fast numerical procedures
   - 1.3 Specialized algorithms
   - 1.4 Parallel implementations
   - 1.5 Optimization of cooperating parallel and serial processes

2. Architectural aspects
   - 2.1 Hardware development methodologies
   - 2.2 Distributed computing approaches
   - 2.3 Innovative architectures
   - 2.4 VLSI implementations

3. Applications
   - 3.1 Pattern recognition
   - 3.2 Image segmentation
   - 3.3 Autonomous vehicle guidance
   - 3.4 Robot motion control
   - 3.5 Remote sensing
   - 3.6 Medical imaging
   - 3.7 Industrial inspection

3.8 Visual data bases
3.9 Image coding

All enquiries can be addressed to the guest editor, Emanuele Salerno, at the following email address: e.salerno@iei.pi.cnr.it

Manuscript Submission
Authors should send five copies of their manuscripts to Dr. E. Salerno, at the address below. Each manuscript should contain a cover page with the title and an abstract, and the indication of the two sub-topics that best match the subject treated in the paper (as said, the above list is not exhaustive).

Emanuele Salerno (Real-Time Imaging)
IEI-CNR
Via Santa Maria, 46
I-56126 Pisa, Italy

Submission deadline
All contributions should be received by 31 March 1999.

From: Georg Stavroulakis <gs@p1.infam.bau.tu-bs.de>
Subject: Announcement: recent books mechanics and optimization
Date: Mon, 18 Jan 1999

The following relatively new books on the area of mechanics and optimization may be of interest to the IPNET community

V.F. Dem'yanov, G.E. Stavroulakis, L.N. Polyakova and P.D. Panagiotopoulos: Quasidifferentiability and nonsmooth modelling in mechanics, engineering and economics.
Kluwer Academic Publishers, 1996.
ISBN: 0-7923-4093-0
More information and online order:
http://www.wkap.nl/book.htm/0-7923-4093-0

E.S. Mistakidis and G.E. Stavroulakis:
Nonconvex optimization in mechanics. Smooth and nonsmooth algorithms, heuristics and engineering applications by the F.E.M.
Kluwer Academic Publishers, 1998.
ISBN 0-7923-4812-5
More information and online order:
http://www.wkap.nl/book.htm/0-7923-4812-5

Dr Ing Georgios E. Stavroulakis
Institute for Applied Mechanics,Technical University Braunschweig
Email g.stavroulakis@tu-bs.de * URL http://www.tu-bs.de/~i5042301

From: "Michelle Hein" <mhein@eos.ncsu.edu>
Subject: Postdoctoral Appointment at NC State
Date: Tue, 15 Dec 1998

Program Assistant
Center for Research in Scientific Computation
North Carolina State University
Campus Box 8205
Raleigh, NC 27695-8205

Recruitment Ad
North Carolina State University
Center for Research in Scientific Computation

The Center for Research in Scientific Computation at North Carolina State University in collaboration with MedAcoustics, Inc., Raleigh, NC, expects to make a University-Industry Cooperative Postdoctoral Research appointment starting August 16, 1999 (availability of the position is contingent upon funding). The appointment will be in the area of applied mathematics and scientific computation. The successful candidate for this position is expected to participate in a collaborative multidisciplinary team carrying out fundamental research investigations to provide a better understanding and predictive capability of the dynamics of wave propagation from coronary stenoses through human body tissues. The research efforts will involve the modeling of wave propagation in a viscoelastic, heterogeneous, and anisotropic medium, development of computational algorithms for both forward and inverse problem analytic studies, and the design of corresponding experiments for model validation and verification. Since the project requires physical modeling, theoretical analysis and computational skills, candidates who are outstanding in at least one of these areas and willing and able to learn quickly in the others will be given highest priority. This position offers a unique opportunity for multidisciplinary mentored post-doctoral research on a mathematical project arising in an industrial/university collaborative effort. Applicants should send a vita and brief description of research interests and have three letters of recommendation sent to: Search Committee, Attn: Hien T. Tran, Center for Research in Scientific Computation/Department of Mathematics, Box 8205, North Carolina State University, Raleigh, NC 27695-8205; e-mail: tran@control.math.ncsu.edu. Applications will be considered at any time after January 15, 1999, as funding becomes available. NCSU is an AA/EOE. However, if this position is funded by NSF, the successful applicant must be a US citizen or lawfully admitted permanent resident alien of the US by Jan. 1, 1999. In its commitment to diversity and equity, NCSU and the CRSC seek applications from women, minorities, and persons with disabilities. Individuals with disabilities desiring accommodations in the application process should contact Rory Schnell, CRSC, Tel: 919-515-5289, Fax: 919-515-1636, e-mail: rlschnel@eos.ncsu.edu.

From: "Janet Thomas" <janet.thomas@ioppublishing.co.uk>
Subject: Contents list for inverse Problems vol 15 no 1
Date: Tue, 26 Jan 1999

Inverse Problems February 1999 Volume 15, Issue 1
Table of Contents

PAPERS

Rational reflection coefficients in inverse scattering for a Dirac system A H Khater, A A Abdalla, D K Callebaut and A G Ramady

The inverse nodal problem on the smoothness of the potential function
C K Law, C-L Shen and C-F Yang

Uniqueness of electromagnetic inversion by local surface measurements
J Liukkonen

First-kind Fredholm integral equations with kernel of Hankel type
A Losi and A Sacchetti

Parameter identification for an elliptic partial differential equation with distributed noisy data R Luce and S Perez

On the regularization of nonlinear ill-posed problems via inexact Newton iterations A Rieder

Bigger uncertainties and the Big Bang
L Tenorio, P B Stark and C H Lineweaver

INVERSE PROBLEMS NEWSLETTER

Why not visit the Inverse Problems home page at
http://www.iop.org/Journals/ip?

Janet Thomas
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WWW: http://www.iop.org

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: Contents: Surveys on Mathematics for Industry
Date: Thu, 7 Jan 1999

Surveys on Mathematics for Industry 1998 Vol. 7, No. 4
Table of Contents

Surveys on Mathematics for Industry 1998 Vol. 8, No. 1
Table of Contents

A. Meister, T. Sonar

Modeling and optimal design of diffractive optical structures
G. Bao, D.C. Dobson

Inverse Problems of vibrational spectroscopy as nonlinear ill-posed problems I.V. Kochikov, G.M. Kuramshina, A.G. Yagola

Heinz W. Engl, Editor-in-Chief

From: Baltzer Science <mailer@ns.baltzer.nl>
Subject: Numerical Algorithms contents
Date: Fri, 11 Dec 1998

Numerical Algorithms 1998 Volume 18-2
Table of Contents

Upper bounds for convergence rates of acceleration methods with initial iterations Avram Sidi and Yair Shapira

Singular integral transforms and fast numerical algorithms
Prabir Daripa and Daoud Mashat

An efficient and novel numerical method for quasiconformal mappings of doubly connected domains Prabir Daripa and Daoud Mashat

Incomplete projection algorithms for solving the convex feasibility problem
Ubaldo M. Garc=EDa-Palomares and Francisco J. Gonz=E1lez-Casta=F1o

High performance solution of the complex symmetric eigenproblem
Ilan Bar-On and Marcin Paprzycki

More information about contents, submission and preparation of papers can be found on http://www.baltzer.nl/numa/

Please direct enquiries about subscription and other issues to
subscribe@baltzer.nl

Sincerely,
Baltzer Science Publishers

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Mon, 7 Dec 1998

Linear Algebra and Its Applications December 1998 Vol 287 Issue 1-3
Table of Contents

Special issue celebrating the 60th birthday of LUDWIG ELSNER

Ludwig Elsner and his contributions to core, applied and numerical linear algebra A Bunse-Gerstner, V Mehrmann

Schur-like forms for matrix lie groups, lie algebras and jordan algebras
G Ammar

SR and SZ algorithms for the symplectic (butterfly) eigenproblem

http://www.elsevier.co.jp/locate/ContentsDirect

Contributed by:
Hans Schneider hans@math.wisc.edu.
Department of Mathematics 608-262-1402 (Work)
Van Vleck Hall 608-271-7252 (Home)
480 Lincoln Drive 608-263-8891 (Work FAX)
University of Wisconsin-Madison 608-271-8477 (Home FAX)
Madison WI 53706 USA http://www.math.wisc.edu/~hans (URL)

From: Secretary Support - Magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Wed, 6 Jan 1999

Mathematics of Control, Signals, and Systems 1998 Vol. 11, No. 4
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INFORMATION
Information on MCSS including tables of contents is
available at its home pages:
www.cwi.nl/~schuppen/mcss/mcss.html
www.math.rutgers.edu/~sontag/mcss.html

Address for submissions:
J.H. van Schuppen (Co-Editor MCSS)
CWI
P.O.Box 94079
1090 GB Amsterdam
The Netherlands

Bradley Dickinson, Eduardo Sontag, Jan van Schuppen (Editors)

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

IPNet Digest Volume 6, Number 02 February 27, 1999

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

Today's Topics:
Workshops: British Workshops on Inverse Problems
New Book: Complexity and Information
Errata List: For Book on Parallel Optimization
Table of Contents: Linear Algebra and Its Applications
Table of Contents: Advances in Computational Mathematics

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

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

From: Dr Bill Lionheart <wrblionheart@brookes.ac.uk>
Subject: British Workshops on Inverse Problems Manchester 22nd Feb 1999
Date: Fri, 05 Feb 1999

British Workshops on Inverse Problems

The next Workshop will be held in the Department of Mathematics, University of Manchester, on Monday 22nd February 1999. The talks will be in Room G.14 of the Mathematics Tower, which is opposite the Manchester Museum on Oxford Road.

The programme is as follows.

1.30-2.15 Simon Chandler-Wilde (Brunel)
`Direct and inverse scattering by rough surfaces'

2.15-3.00 Derek Collins (Sheffield)
`Calculating contact pressures from strain and deflection data: an inverse problem'

3.00-3.30 Tea

3.30-4.15 Russell Davies (Aberystwyth)
`Determining the relaxation spectrum of viscoelastic fluids'

4.15-5.00 Sam Howison (Oxford)
`Inverse problems in finance'

* Campus maps and directions are available at www.ma.man.ac.uk. Let me know if you have questions of if you need a car-park permit.
* If you want overnight accommodation, a popular choice is the Grafton Hotel, Grafton Street (southern end of campus; see map). It's about a 5-minute walk from the Department, and costs about 30 pounds. Call 0161-273-3092. Another option (about 40 pounds) is the Manchester Business School (0161-275-6333).

Please forward this message to interested colleagues and let me know if you are planning to come to the Workshop. Thanks.

See you on the 22nd. ...Paul Martin

Submitted by:
Dr. Paul A. Martin Tel: +44-161-275-5883
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University of Manchester Email: pamartin@man.ac.uk
Manchester M13 9PL, U.K.

Dr W.R.B. Lionheart, School of Computing and Mathematical Sciences, Oxford Brookes University, Gipsy Lane Campus, Oxford OX3 0BP, UK

Visiting Applied Physics Dept, University of Kuopio, PO Box1627 KUOPIO, 70211 Finland until March 25th 1999.

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email:
p0054865@brookes.ac.uk

British Workshops on Inverse Problems:
http://www.brookes.ac.uk/~p0054865/ukipws/ukipws.html
Electrical Impedance Tomography
http://www.brookes.ac.uk/~p0054865/research/intro.html

From: Art Werschulz <agw@cs.columbia.edu>
Subject: New book: Complexity and Information
Date: Thu, 11 Feb 1999

COMPLEXITY AND INFORMATION

J. F. TRAUB
Columbia University and Santa Fe Institute

A. G. WERSCHULZ
Fordham University and Columbia University

CAMBRIDGE UNIVERSITY PRESS

Simultaneous publication in hard and soft cover as part of the series Lezioni Lincee, Accademia Nazionale dei Lincei

The twin themes of computational complexity and information pervade this book. The authors begin with an introduction to the computational complexity of continuous mathematical models, that is, information-based complexity. This is used to illustrate a variety of topics, including breaking the curse of dimensionality, complexity of path integration, solvability of ill-posed problems, the value of information in computation, assigning values to mathematical hypotheses, and new, improved methods for mathematical finance.

The style is informal, and the goals are exposition, insight and motivation. A comprehensive bibliography is provided, to which readers are referred for precise statements of results and their proofs. As the first introductory book on the subject it will be invaluable to the many students and researchers whose disciplines are influenced by the computational complexity of continuous problems.

CONTENTS

Hardback   0-521-48005-1   US$54.95 UK L35.00
Paperback   0-521-48506-1   US$19.95 UK L12.95

This book can be ordered online:

* It can be conveniently ordered from Cambridge University Press via http://www.cs.columbia.edu/~traub
* It can also be ordered through amazon.com or barnesandnoble.com

It can, of course, be obtained through your bookstore.

From: Yair Censor <yair@mathcs2.haifa.ac.il>
Subject: Errata list, book on parallel optimization by Censor and Zenios
Date: Fri, 12 Feb 1999

[Ed: Original item was posted in IPNet Digest: Vol 4, No. 7, July 1997]

Errare humanum est...

We proudly announce that our tireless efforts to publish the "first ever published book without errors" have failed....

For the benefit of the readers of our book (see full publication details below) we installed an Errata list at the following internet site: http://www.ucy.ac.cy/ucy/pba/zenios/bookinfo.html

We would be grateful to anyone bringing to our attention further errors, typos, or omissions of credits and references. We will gladly post those

on the page.
Yair Censor and Stavros Zenios

P.S. If you wish a .ps file of the Errata list e-mailed to you please send
a request to: yair@mathcs2.haifa.ac.il

PARALLEL OPTIMIZATION : THEORY, ALGORITHMS, AND APPLICATIONS
By Yair Censor and Stavros A. Zenios,
A volume in the series: "Numerical Mathematics and Scientific Computation",
Oxford University Press, New York, 1997.
Hardcover, 576 pages, ISBN 0-19-510062-X.
For information on the book, including Title Page, Foreword, Preface, Organization of the Book, Suggested Course Outlines, Acknowledgements, and Ordering Instructions, please visit the publisher on the internet at http://www.oup-usa.org/gcdocs/gc_019510062X.html

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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA Contents
Date: Thu, 18 Feb 1999

Linear Algebra and Its Applications December 1998 Vol. 286, Issue 1-3
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Linear Algebra and Its Applications February 1999 Vol. 288, Issue 1-3

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Linear Algebra and Its Applications March 1999 Vol. 289, Issue 1-3

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Seventh Special Issue on Linear Algebra and Statistics
Special Editors: S.PUNTANEN, G.P.H.STYAN, H.J.WERNER

On semi-orthogonality and a special class of matrices J Gross

Frechet distance as a tool for diagnosing multivariate data
ALIS Hadi, H Nyquist

Use of the Gibbs sampler to invert large, possible sparse, positive definite matrices DA Harville

Changes in the general linear model: a unified approach
SR Jammalamadaka

The Marcus-de Oliveira conjecture, bilinear forms, and cones
A Kovacec

A note on the parameter set for factor analysis models WP Krijnen

Matrix results on the Khatri-Rao and Tracy-Singh products S Liu

Simultaneous polar decomposition of rectangular complex matrices
A Markiewicz

Softly unbiased estimation part 1: the Gauss-Markov model B Schaffrin

On oblique projectors Y Takane

Some new results on correlation-preserving factor scores prediction methods JMF Ten Berge

The perturbed nonhomogeneous Markov systems PCG Vassiliou

Two-way selection of covariables in multivariate growth curve models
SG Wangi, T Nummi

****

Linear Algebra and Its Applications March 1999 Vol. 290, Issue 1-3
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Real quadratic flexible division algebras
JA Cuenca Mira, A Rochdi

On local w-uniqueness of solutions to linear complementarity problem
SONG Xu

Singular numbers of contractions in spaces with an indefinite metric and Yamamoto's theorem
A Ben-Artzi

The relationship between the class u_2(R,S) of (0,1,2)-matrices and the collection of constellation matrices
SUMEI Hou

Extending the notions of companion and infinite companion to matrix polynomials
M Van Barel, V Ptak

Index of Hadamard multiplication by positive matrices
D Stojanoff

A fixed point theorem and a norm inequality for operator means

JS Aujla

Generalized inversion of finite rank Hankel and Toeplitz operators with rational matrix symbols
VM Adukov

An inequality for non-negative matrices
MW Wang, J Shallit

The contragredient equivalence: application to solve some matrix systems
P Rubio

Mappings preserving spectrum and commutativity on Hermitian matrices
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The symmetric inverse m-matrix completion problem
CHR Johnson, RL Smith

The realization graph of a degree sequence with majorization gap 1 is hamiltonian
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Irreducible matrices with reducible principal submatrices
D London

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K Cechlarova

Eigenvalue interlacing and weight parameters of graphs
MA Fiol

NOTE:
ContentsDirect lists the first author of each paper and the corresponding author (if different).

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From: Baltzer Science <mailer@ns.baltzer.nl>
Subject: Advances in Computational Mathematics contents
Date: Mon, 15 Feb 1999

Advances in Computational Mathematics 1999 Volume 10-2
Table of Contents

Optimal discrete and continuous mono-implicit Runge--Kutta schemes for BVODEs P.H. Muir

A class of modified block SSOR preconditioners for symmetric positive definite systems of linear equations Zhong-Zhi Bai

A Chebyshev polynomial method for line integrals with singularities J.C. Mason and E. Venturino

Degree estimates for Ck-piecewise polynomial subdivision surfaces Hartmut Prautzsch and Ulrich Reif

More information about contents, submission and preparation of papers can be found on

http://www.baltzer.nl/adcom/

Please direct enquiries about subscription and other issues to=20

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Sincerely,
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------- end -------

IPNet Digest Volume 6, Number 03 April 1, 1999

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

Today's Topics:
Seminar: Inverse Problems Seminar of the Pacific Northwest
Course: Computational Math. Driven by Industrial Applications
Conference: Differential Equations & Computational Simulations
Ph.D. Student Position: Research in Inverse Problems
Postdoctoral Position: Computational Physics & Signal Processing
Postdoctoral Position: Electrical Impedance Tomography
New book: Regularization of First-Kind Volterra Equations
Table of Contents: Journal of Inverse and Ill-Posed Problems
Table of Contents: Inverse Problems
Table of Contents: Surveys on Mathematics for Industry
Table of Contents: Linear Algebra and its Applications

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

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

From: Gunther Uhlmann <gunther@math.washington.edu>
Subject: Inverse Problems Seminar of the Pacific NW
Date: Fri, 26 Mar 1999

First Announcement

INVERSE PROBLEMS SEMINAR OF THE PACIFIC NORTHWEST

1999 Meeting

University of Washington
Seattle, WA

Saturday and Sunday, May 15-16, 1999

Schedule:

Saturday, May 15

11:00 Coffee
11:30 William Symes (Rice University)
(TBA)
12:30 Lunch
2:30 Matti Lassas (Rolf Nevanlinna Institute, Finland)
"On determining a Riemannian manifold from the set
of Cauchy data of harmonic functions"
4:00 Liliana Borcea (Rice University)
"An asymptotic study of the Neumann to Dirichlet map in impedance
tomography"
5:15 Contributed talks

Sunday, May 16

 9:00 Coffee
 9:30 Cliff Nolan (UW)
      "High-Frequency linearized inversion in anisotropic models of the
       earth"
11:00 Lassi Paivarinta (University of Oulu, Finland)
      "On recovering singularities from back-scattering data"

Abstracts are available at the IPSPN Web site
http://www.math.washington.edu/~chappa/IPSPN/
Times and locations will be announced shortly. There will be a dinner for participants on Saturday evening.

This conference is free to all participants, and advance registration is not necessary. Limited travel support is available for participants in this meeting. Please contact Gunther Uhlmann (gunther@math.washington.edu) if you need travel support. For general information about the IPSPN, visit the IPSPN web site:

http://www.math.washington.edu/~chappa/IPSPN/

It contains up-to-date information about this meeting, information about hotels and transportation in Seattle

To request disability accommodations, contact the Office of Disability Services ten days in advance of the event: 206-543-6450 (voice); 206-543-6452 (TDD); 206-685-3885 (FAX); access@u.washington.edu (E-mail).

If you still have questions, or would like to be added to or removed from the IPSPN mailing list, contact Gunther Uhlmann (gunther@math.washington.edu) (206-543-1946).

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: CIME Course
Date: Fri, 26 Mar 1999

A Course on

"Computational Mathematics driven by Industrial Applications"

will be held by CIME (International Mathematical Summer Center) in Martina Franca (Apulia, Italy) during June 21-27, 1999.
The Directors of the Course are Vincenzo Capasso (Univ. of Milano), Heinz W. Engl (Univ. of Linz), and Jacques Periaux (Dassault Aviation).

COURSES

The following sets of 5/6 hours lectures each in English will be offered

1. Paths, trees and flows: graph optimization problems with industrial applications
   by Prof. Rainer BURKARD (Technische Universitaet Graz)

2. New computational concepts, adaptive differential equation solvers and
   virtual labs,
   by Prof. Peter DEUFLHARD (Konrad Zuse Zentrum Berlin)

3. Computational methods for aerodynamic analysis and design,
by Prof. Antony JAMESON (Stanford University)

4. Mathematical problems in industry
by Jacques Louis LIONS (College de France et Dassault Aviation, Paris)

5. Wavelets transform and cosine transform in signal and image processing
by Gilbert STRANG (MIT)

SEMINARS

A set of two hours seminars in English will be offered too

a. Mathematics of the crystallization process of polymers
by Vincenzo CAPASSO

b. Inverse problems: regularization methods and applications in industry
by Heinz ENGL

c. Mathematics of Glass
by Robert MATTHEIJ (Technische Universitaet Eindhoven)

d. Combining game theory and genetic algorithms for solving multiobjective
shape optimization problems in aerodynamics Engineering
by Jacques PERIAUX

Infos and Apllications for Participation:

http://www.math.unifi.it/cime/

Deadline for applications: April 30, 1999.

NO FEES are due.

An important consideration in the acceptance of the application is the scientific relevance of the course to the field of interest of the applicant.

Applicants are requested therefore to submit along with their application, a scientific curriculum and a letter of recommendation.

There is a chance of having your expenses partially covered by the European Union if you are up to 35 years old and area citizen of a member state of the EU or reside in such a state for at least one year. Please quote in the application the need of support and conditions for eligibility.

SITE

Martina Franca is a delightful baroque town made of white houses of Apulian spontaneous architecture. It is the major and aristocratic centre of the "Murgia dei Trulli" standing on a hill which dominates the well known Itria Valley , which is spotted with "trulli" typical dry stone houses of conical shape which go back to the 15th century. A masterpiece of the baroque architecture is the ducal palace where the

Course will be hosted. Martina Franca belongs to the province of Taranto, one of the major centres of Magna Grecia, particularly devoted to Mathematics. Taranto houses an outstanding museum of Magna Grecia with fabulous collections of gold manufactures.

LODGING

Special rates are offered by Park Hotel San Michele (four star hotel):

Lit. 70.000 full board for accommodation in double room
Lit 100.000 full board for accommodation in single room

Participants are requested to made their reservations directly at the hotel (CIME may reimburse selected participants - see above)

tel +39 0804807053
fax +39 0804808895

Prof.Dr.Heinz W. Engl E-Mail: engl@indmath.uni-linz.ac.at
Institut fuer Industriemathematik secretary:nikolaus@indmath.uni-linz.ac.at
Johannes-Kepler-Universitaet Phone:+43-(0)732-2468...,ext.9219 or 693,
Altenbergerstrasse 69 secretary: ext.9220; as Dean: ext.3220
A-4040 Linz Fax:ext. 855, in Dean's affairs:ext.3225
Oesterreich / Austria home phone: +43-(0)732-245518
World Wide Web: http://www.indmath.uni-linz.ac.at/

From: Jennifer Collins <jcollins@ERC.MsState.Edu>
Subject: 4th Mississippi State Conference on DE & CS
Date: Mon, 22 Mar 1999

Fourth Mississippi State Conference on

Differential Equations & Computational Simulations

REMINDER ---- Abstracts Deadline March 31, 1999.

NOTE ---- NSF Proposal for Travel Support for Graduate Students/ Recent Ph.D.s has been recommended for funding -- details on how to apply etc will be posted on the conference web page very soon. Application Deadline: April 16, 1999. Contact person: J.Zhu (jzhu@math.msstate.edu).

Second Announcement and Call for Papers

MAY 21-22, 1999
Mississippi State University

Organized by: Department of Mathematics and Statistics and NSF Engineering Research Center

Co-Sponsor: Electronic Journal of Differential Equations

Principal Speakers:

Lawrence C. Evans, University of California, Berkley
Charbel Farhat, University of Colorado, Boulder
Irene Fonseca, Carnegie Mellon University
Ahmed Noor, University of Virginia
James Serrin, University of Minnesota
Paul Waltman, Emory University
Mary Wheeler, University of Texas, Austin

This interdisciplinary conference will provide a joint forum where mathematicians, scientists, and engineers from academia and industry can exchange research ideas involving theoretical and applied developments in differential equations and computational simulations. In addition to the seven principal lectures, there will be sessions of contributed talks. This conference is held bi-annually. Reviewed manuscripts will be published as a special issue of the Electronic Journal of Differential Equations.

Abstracts for contributed papers should be submitted

****
no later than March 31, 1999
****

and should be done on-line at the conference web. In the event that it is not possible to do it through the web, contact Dr. Jianping Zhu (Program Chair) at jzhu@math.msstate.edu.

For further information on the conference organization, program, and

Travel/Registration Funding Possibilities for Graduate Students & Recent Ph.D.s via a National Science Foundation Grant

visit the conference webpage at

http://www.msstate.edu/Dept/Math/conf.html.

Conference organizers:

Ratnasingham Shivaji
Department of Mathematics & Statistics
Mississippi State, MS 39762, USA.
shivaji@math.msstate.edu
Phone:601-325-3414/7142
Fax:601-325-0005

Bharat Soni
NSF Engineering Research Center
Mississippi State, MS 39762, USA.
bsoni@erc.msstate.edu
Phone:601-325-8278
Fax:601-325-7692

From: Otmar Scherzer <scherzer@indmath.uni-linz.ac.at>
Subject: Ph.D. Student Position in "Inverse Problems"
Date: Mon, 8 Mar 1999

Ph.D. Student Position in "Inverse Problems"

The ``Spezialforschungsbereich'' SFB F013 ''Numerical and Symbolic Scientific Computing'' offers a Ph.D. student position for research in ``Estimation of Discontinuous Parameters in Differential Equations'' funded by the ``Austrian Research Fund'' FWF from July 1999 to March 2001. The successful candidate will be responsible for research in Parameter Estimation and should have experience in either one of the

following mathematical fields: Inverse Problems, Wavelets, and Image Processing.

From a successful candidate we expect the ability to work in an interdisciplinary research environment. The research activities will be part of the work of the SFB which is concerned with the development of new numerical, symbolic and coupled methods for the solution of field problem arising in mechanics, electromagnetics, inverse problems and image processing. The methods are implemented in innovative software packages.

Interested candidates are invited to send a CV to

A. Univ.-Prof. Dr. O. Scherzer
Johannes Kepler University Linz
Institut fuer Industriemathematik
Altenbergerstr. 69
A--4040 Linz
Austria

E-mail: scherzer@indmath.uni-linz.ac.at
Fax ++43-732-2468--855

Otmar Scherzer
Institut fuer Mathematik
Johannes-Kepler-Universitaet
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E-Mail: scherzer@indmath.uni-linz.ac.at
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Fax: +43-(0)732-2468-855, attn.: Otmar Scherzer
Telex: 2-2323 uni li a

From: "Eric L. Miller" <elmiller@cdsp.neu.edu>
Subject: Submission for IP Net
Date: Thu, 4 Mar 1999

Post-Doctoral Research Position Available at Northeastern University, Boston MA in Computational Physics and Signal Processing.

Description: As part of a contract from the US Department of Energy aimed at the development of physics based signal and image processing methods for environmental remediation, a post-doctoral research position is available at Northeastern University in Boston, MA combining elements of computational physics and signal/image processing. In particular, we are interested in characterizing and tracking the structure over time of contaminant plumes based on cross-well, bore-hole radar data. The initial phase of the work will be directed toward the refinement of an existing 3D vector electromagnetic scattering code used to describe the propagation of energy through the earth, the interaction of the energy with the plumes, and the process of measuring the resulting scattered fields. The second portion of the research will center on the development of data inversion algorithms based on these models. We are currently considering a variety of methods for approaching these problems including 1. A traditional inverse scattering formulation in which a full 3D reconstruction of the electrical properties of the medium is produced. Essentially this approach requires the solution

of a high dimensional non-linear inverse problem. 2. Methods based on array or match field processing techniques for which the processing objective is the determination of the location of an object of partially known shape and composition. 3. Active contour/active surface techniques which are specifically tailored to the determination of the shape of an unknown perturbation in the medium. Implementation of these methods in a recursive, Kalman filtering-type framework to perform plume tracking is also of interest.

Requirements: A Ph.D. and strong analytical skills in a field relevant to the above described work (eg. Electrical Engineering, Mathematics, Physics, etc.) with experience in at least a subset of the following areas:

1. Signal or image processing with emphasis on restoration methods,
2. Computational electromagnetics,
3. Numerical analysis
4. Inverse scattering.

The candidate will be expected to carry out research in an independent manner and if interested aid in the supervision of Master's and Doctoral level graduate students. Strong oral and written English skills are a must. Funding is available for up to 1 year and we are looking for someone to start as soon as possible.

All interested applicants are invited to contact

Prof. Eric Miller
235 Forsyth Building
Northeastern University
Boston, MA 02115
Tel: 617-373-8386
Email: elmiller@ece.neu.edu
Web http://claudius.cdsp.neu.edu/elmhome

for more information or to submit an application (CV, references, and a reprint of a published journal article).

From: Jari Kaipio <kaipio@uku.fi>
Subject: A post doc position in EIT/process tomography
Date: Wed, 10 Mar 1999

An open post-Doc position

The position is filled in the Department of Applied Physics, University of Kuopio (DAP) in a research group whose main interests are in the theory and applications of inverse problems and time series analysis. The field of research is electrical impedance/process tomography. The computational approach/setting includes

- 3D finite element models for EIT
- Statistical inversion/nonstandard prior models
- Dynamical inversion methods: optimal estimation theory
- Stochastic flow (e.g. Navier-Stokes) models

There are two senior researchers and seven graduate students who are involved in this project at DAP. Relevant research material can be found in

http://venda.uku.fi/research.areas/bmipg.html.

The research is carried out in collaboration with The Department of Mathematics, Helsinki Univesity of Technology (prof. Erkki Somersalo) and The Department of Mathematics, UMIST, Manchester (Dr. William Lionheart).

The candidates are expected to be competent in applied mathematics, computational modelling and programming. The software platform is mainly Matlab but experience in C++ is also considered to be an asset. The primary task of the candidates is stochastic flow modelling. The position is open immediately and will last at least until September 31, 2001. There is no dead line for the position.

For further information contact prof. Jari Kaipio (kaipio@venda.uku.fi) or prof. Erkki Somersalo (esomersa@dopey.hut.fi).

Submitted by:
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From: VSP - Els van Egmond <vsppub@compuserve.com>
Subject: New titles in 'Inverse and Ill-Posed Problems Series'
Date: Wed, 10 Mar 1999

Recently published in the "Inverse and Ill-Posed Problems Series":

Small Parameter Method in Multidimensional Inverse Problems
A.S. Barashkov
1998; iv + 140 pages
ISBN 90-6764-295-9
DEM 150/USD 95/GBP 59

Regularization, Uniqueness and Existence of Solutions of Volterra Equations of the First Kind
A.Asanov
1998; vi+276 pages
ISBN 90-6764-287-8
DEM 238/USD 150/GBP 94

Tables of contents of above books and information on other books in this book series can be found on http://www.vsppub.com/books/bs3.html

VSP - Int.'l. Science Publishers
P.O. Box 346
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Fax: +31 30 693 2081
E-mail: vsppub@compuserve.com
http://www.vsppub.com

From: VSP - Els van Egmond <vsppub@compuserve.com>
Subject: Table of Contents, Journal of Inverse and Ill-Posed Problems
Date: Wed, 10 Mar 1999

Journal of Inverse and Ill-Posed Problems 1999 Vol. 7, No. 1
Table of Contents

Journal of Inverse and Ill-Posed Problems 1999 Vol. 7, No. 2
Table of Contents

More information on this journal, such as contents of previous issues, instructions to authors, can be found on:
http://www.vsppub.com/journals/jn-JouInvIllPro.html

VSP - Int.'l. Science Publishers
P.O. Box 346
3700 AH Zeist
Netherlands
Fax: +31 30 693 2081
E-mail: vsppub@compuserve.com
http://www.vsppub.com

From: "Janet Thomas" <janet.thomas@ioppublishing.co.uk>
Subject: Contents list for Inverse Problems
Date: Tue, 30 Mar 1999

Inverse Problems April 1999 Vol 15, Issue 2

Table of Contents

Probabilistic analysis of implicit inverse problems
K Mosegaard and C Rygaard-Hjalsted

A new formula for restoration of telegraphic waveform
S K Foong and S Kanno

Monitoring underground flows with electromagnetic methods
D C Dobson and P G Kaup

Positive solutions to linear inverse problems
G D de Villiers, B McNally and E R Pike

Reconstruction of a source domain from the Cauchy data
M Ikehata

Why not visit the Inverse Problems home page at
http://www.iop.org/Journals/ip?

Submitted by: Janet Thomas, Production Editor
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WWW: http://www.iop.org

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: Contents for Surveys on Mathematics for Industry
Date: Fri, 19 Mar 1999

Surveys on Mathematics for Industry 1999 Vol.8, 2
Table of Contents

Heinz W. Engl, Linz, Austria
Editor-in-Chief

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A-4040 Linz Fax:ext. 855, in Dean's affairs:ext.3225
Oesterreich / Austria home phone: +43-(0)732-245518
World Wide Web: http://www.indmath.uni-linz.ac.at/

From: Hans Schneider <hans@math.wisc.edu>
Subject: Contents, LAA 291
Date: Wed, 24 Mar 1999

Linear Algebra and Its Applications April 1999 Vol. 291, Issues 1-3
Table of Contents

A simple approach to matrix realizations for Littlewood-Richardson sequences GD Appleby

Gershgorin's theorem for matrices of operators HN Salas

The contragredient equivalence for several matrices: a set of invariants J Gelonch

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Decomposability and structure of nonnegative bands in m_n(r) A Marwaha

An alternative system of structural invariants of quadruples of matrices I Garcia-Planas

Inequalities for c-s seminorms and lieb functions RA Horn

Multiplicities of eigenvalues of some linear search schemes AJ Pryde

Triangular powers of integers from determinants of bionomial coefficient matrices LJ Ratliff, DE Rush

Some lowner partial orders of schur complements and kronecker products of matrices J Liu

Perron vector ordering for a subclass of tournament matrices S Kirkland

On simultaneous similarity of matrices and related questions JA Dias Da Silva

Inverse updating and downdating for weighted linear least squares using M-invariant reflections J Zhao

Extreme rays for cones of hermitian matrix functions that are non-negative on the positive semi-definite matrices TH Pate

Linear algebra and its applications multivariate versions of cochran theorems CS Wong

Not all GKK tau-matrices are stable O Holtz

Maximal abelian subalgebras of e(p,q) algebras Z Thomova

ContentsDirect from Elsevier Science
URL: http://www.elsevier.nl/locate/jnlnr/07738

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IPNet Digest Volume 6, Number 04 April 30, 1999

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

Today's Topics:
International Symposium: Advances in Computational Heat Transfer
New Edition of Book: Linear Integral Equations
Table of Contents: Inverse Problems in Engineering

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

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

From: "Prof. Graham de Vahl Davis" <cht01@cfd.mech.unsw.edu.au>
Subject: International Symposium: CHT'01
Date: Tue, 13 Apr 1999

PRELIMINARY ANNOUNCEMENT: CHT'01

The International Centre for Heat and Mass Transfer will hold its

2nd International Symposium on

Advances in Computational Heat Transfer

in Palm Cove, Cairns, North Queensland, Australia
on May 20-25, 2001.

Please make a note of the dates and plan to participate
and to visit this tropical resort area.

Proceedings of CHT'97 (in hard copy or on CD-ROM) are available from

Professor Faruk Arinc
Secretary-General, ICHMT.
arinc@metu.edu.tr

Submitted by:
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School of Mechanical and Manufacturing Engineering
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Email: cht01@cfd.mech.unsw.edu.au
http://ichmt.me.metu.edu.tr/upcoming-meetings/CHT-01/announce.html

---

From: kress@math.uni-goettingen.de
Subject: New edition: Linear Integral Equations
Date: Fri, 23 Apr 1999

The following book appeared recently:

Rainer Kress, Linear Integral Equations, 2nd Edition

(Applied Mathematical Sciences. Vol. 82) Springer--Verlag

This book resulted from the author's fascination with the mathematical beauty of integral equations. It is an attempt to combine theory, applications, and numerical methods, and cover each of these fields with the same weight. In order to make the book accessible to mathematicians, physicists, and engineers, the author has made the work as self-contained as possible, by requiring only a solid foundation in differential and integral calculus. The functional analysis which is necessary for an adequate treatment of the theory and the numerical solution of integral equations is developed within the book. Problems are included at the end of each chapter. For the second edition, in addition to corrections and adjustments throughout the text, as well as an updated reference section, new topics have been added.

Contents: Normed Spaces. Bounded and Compact Operators. Riesz Theory. Dual Systems and Fredholm Alternative. Regularization in Dual Systems. Potential Theory. Singular Integral Equations. Sobolev Spaces. The Heat Equation. Operator Approximations. Degenerate Kernel Approximation. Quadrature Methods. Projection Methods. Iterative Solution and Stability. Equations of the First Kind. Tikhonov Regularization. Regularization by Discretization. Inverse Boundary Value Problems. References. Index.

2nd ed. 1999. . 365 pp. 1 fig.
Hardcover $59.95
ISBN 0-387-98700-2

From: James Beck <beck@egr.msu.edu>
Subject: Inverse Problems in Engineering
Date: Sat, 17 Apr 1999

Inverse Problems in Engineering 1999 Vol. 7, Number 1
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------- end -------

IPNet Digest Volume 6, Number 05 June 30, 1999

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

Today's Topics:

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

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

From: ipnet@math.msu.edu
Subject:IPNET Server Working Again
Date: Tue, 15 Jun 1999

The server handling the IPNet crashed at the end of May 1999 and had to be replaced. This meant that for over a week (in late May and early June), users may have had difficulty reaching the IPNet. We apologize for any inconvenience this may have caused.

The new IPNet server should be fully operational now.

-ipnet

From: "Professor Yagola" <yagola@inverse.phys.msu.su>
Subject: workshop on inverse problems of chemistry
Date: Sun, 27 Jun 1999

The first workshop on Inverse Problems of Chemistry has been held on June, 12-13, 1999, at Birsk Educational University (Birsk, Bashkortostan, Russian Federation). Organizers are Yu.B. Monakov, V.P. Budtov, S.I. Spivak, S.M. Usmanov, A.G. Yagola, P.A.Yakshibaev. The main direction of discussions was pointed out on the inverse problems of polymer chemistry and vibrational spectroscopy.

The next workshop is scheduled on June, 2001.

Anatoly G. Yagola,
Dr. Sc., Professor, Department of Mathematics, Faculty of Physics,
Moscow State University, Moscow 119899, Russia
Mailing address(home): 18-2-93 Matveevskaya Str., Moscow 119517, Russia
Tel.(home): (7)(095)442-3335
FAX: (7)(095)932-8820

E-mail: yagola@inverse.phys.msu.su

From: flores@siam.org
Subject: SIAM Meeting Announcements
Date: Thu, 06 May 99

Eighth International Conference on Numerical Combustion
March 5-8, 2000
Amelia Inn and Beach Club
Amelia Plantation, Amelia Island, Florida

Conducted by Society for Industrial and Applied Mathematics (SIAM)
with the cooperation of Institut National de Recherche en Informatique
et en Automatique (INRIA)

September 1, 1999: Deadline for submission of minisymposium proposals
September 15, 1999: Deadline for submission of contributed abstracts
for lecture or poster presentations

For instructions on how to submit minisymposium proposals and abstracts and to obtain more information about the Combustion conference, visit: www.siam.org/meetings/nc00/.

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Eleventh Annual ACM-SIAM Symposium on Discrete Algorithms
SODA 2000
January 9-11, 2000
Holiday Inn Golden Gateway Hotel
San Francisco, California

Conducted by Society for Industrial and Applied Mathematics (SIAM) and
sponsored by ACM Special Interest Group on Algorithms and Computation
Theory (SIGACT) and SIAM Activity Group on Discrete Mathematics (SIAG/DM)

Deadline for Abstract Submission:
Long form (10 pages): July 13, 1999
Short form (2 pages): July 30, 1999
For instructions on how to submit extended abstracts and to obtain more information about SODA 2000, visit: www.siam.org/meetings/da00/

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: New titles in " Inverse and Ill-Posed Problems Series"
Date: Wed, 23 Jun 1999

Recently published in the "Inverse and Ill-Posed Problems Series":

Volterra Equations and Inverse Problems
A.L. Bughgeim
1999; x+204 pages
ISBN 90-6764-302-5

DEM 190/USD 113/GBP 71
www.vsppub.com/books/mathe/bk-VolEquInvPro.html

Elements of the Theory of Inverse Problems
A.M. Denisov
1999; viii+272 pages
ISBN 90-6764-303-3
DEM 236/USD 141/GBP 88
www.vsppub.com/books/mathe/bk-EleTheInvPro.html

Tables of contents of above books and information on other books in this book series can be found on http://www.vsppub.com/books/bs3.html

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From: Hans Schneider <hershkow@math.wisc.edu>
Subject: LAA announcment

Linear Algebra and its Applications
Special Issue on
INFINITE SYSTEMS OF LINEAR EQUATIONS FINITELY SPECIFIED

One of the traditional hunting grounds of linear algebra is the area of finite systems of linear equations, as described by a matrix equation $Ax = b$. Here A is a known matrix, b a known vector of finite dimensions, and x is an unknown vector of finite dimensions, which is to be determined such that the equation is either satisfied, or, if that is not possible, approximately satisfied. Many techniques are known for finding solutions or approximate solutions, depending on the properties of the given data and the approximation technique choosen.

If the system of equations is not finite, i.e. A is not a matrix but an operator, and b and x are of infinite dimension, then algebraic and numerical techniques can still be used provided the given data are finitely specified. Operators with such a property are often called 'structured operators', and it turns out that one can solve such infinite equations in an exact or approximate sense using finite methods and algorithms.

The conjunction of linear algebra and inversion theory for finitely specified infinite operators brings interesting connections to the forefront: algebraic equivalents of inner-outer factorizations e.g., or the algebraic significance of Kalman filtering. Structured matrices can be of many types, e.g. systems with finite displacement ranks or time-varying systems with state spaces of finite dimensions and whose limiting behaviour is known, e.g. as a time invariant system.

A non-limiting list of topics of interest in this area is (assuming A is an infinite but finitely described operator of some kind):
- inversion methods
- decomposition methods for the operator A
- quadratic approximation methods
- complexity reduction

- equivalencies
- canonical forms
- transform techniques.

Examples of operator structure:
- systems with low displacement rank
- finitely described time-varying systems
- finitely described almost-periodic systems
- differentials of non-linear systems.

Interested authors are kindly invited to submit full papers with significant contributions to this area to any of the three guest editors listed below before June 1st, 2000.

Patrick Dewilde
DIMES, Delft University of Technology
POB 5031,
2600GA Delft, the Netherlands.
Fax: +31 15 262 3271
email: dewilde@DIMES.tudelft.nl

Vadim Olshevsky
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Georgia State University
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480 Lincoln Drive 608-263-8891 (Work FAX)
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Madison WI 53706 USA http://www.math.wisc.edu/~hans (URL)

20 June - 09 July 1999 hershkow@math.wisc.edu

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: position announcement
Date: Thu, 17 Jun 1999

Announcement of a Professorship for Scientific Computing

The College of Science and Engineering of the Johannes Kepler University in Linz (Austria) advertises a newly created professorship (second salary category) for Scientific Computing to be filled on or after October 1, 2000.

We are looking for a mathematician with habilitation or equivalent

qualification with a relevant publication record preferably in the area of eometric analysis in connection with nonlinear partial differential equations or calculus of variations, especially scientific visualization. Candidates should be able to establish and lead an externally-funded research group; they should have the necessary pedagogical qualification for teaching at all levels. Applicants whose research profile fits into the Special Research Project "Numerical and Symbolic Scientific Computing" will be preferred; this special research project deals with the interaction between numerics, symbolics and graphics in connection with partial differential equations from science and technology. Especially the areas of graphics and of software technology for mathematical systems should be strengthened by this appointment.

The Johannes Kepler University specifically encourages female candidates to apply, with a view to increasing the proportion of female professors. Women candidates will be given preference over equally qualified male applicants.

Applications should be accompanied by a curriculum vitae, list of publications, teaching record, and copies of five of the candidate's most important and relevant publications and should be submitted to Dean Prof. Dr.Heinz W. ENGL, Dekanat der TNF, Johannes Kepler Universitaet Linz, Altenbergerstr. 69, A-4040 Linz, Austria, no later than Nov. 12, 1999.

Submitted by:
Prof.Dr.Heinz W. Engl E-Mail: engl@indmath.uni-linz.ac.at
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From: James Beck <jamesverebeck@home.com>
Subject: Contents: Inverse Problems in Engineering
Date: Mon, 03 May 1999

Inverse Problems in Engineering 1999 Vol. 7, Number 2
Table of Contents

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: Contents of Journal of Inverse and Ill-Posed Problems
Date: Wed, 19 May 1999

Journal of Inverse and Ill-Posed Problems 1999 Vol. 7, No. 3
Table of Contents

More information on this journal, such as contents of previous issues, instructions to authors, can be found on:
http://www.vsppub.com/journals/jn-JouInvIllPro.html

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http://www.vsppub.com

From: "Martin Beavis" <martin.beavis@ioppublishing.co.uk>
Subject: Contents, Inverse Problems, Volume 15, Issue 3
Date: Tue, 25 May 1999

Inverse Problems June 1999 Volume 15, Issue 3
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Solution of the initial-boundary value problem for the Karpman--Kaup equation F-X Hugot and J Leon

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Regularization of a non-characteristic Cauchy problem for a parabolic equation in multiple dimensions
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Solving inverse problems for ordinary differential equations using the Picard contraction mapping H E Kunze and E R Vrscay

Velocity reconstruction in conducting fluids from magnetic field and electric potential measurements F Stefani and G Gerbeth

Nonlinear integrodifferential equations as discrete systems
K M Tamizhmani, J Satsuma, B Grammaticos and A Ramani

Inverse spectral problems for weighted Dirac systems B A Watson

COMMENT
A note on an integrable discretization of the nonlinear Schr\"odinger equation W Black, J A C Weideman and B M Herbst

Visit the Inverse Problems home page at http://www.iop.org/Journals/ip

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From: Secretary Support - Magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS, Vol. 12, Nos. 1-2
Date: Fri, 21 May 1999

Mathematics of Control, Signals, and Systems 1999 Vol. 12, No. 1
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Finite horizon minimax optimal control of stochastic partially observed time varying uncertain systems V.A. Ugrinovskii and I.R. Petersen

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Global normal forms of MIMO nonlinear systems, with applications to stabilization and disturbance attenuation
B. Schwartz, A. Isidori and T.J. Tarn

A global asymptotic stability result for a class of totally asynchronous discrete nonlinear systems V.S. Kozyakin, A. Bhaya and E. Kaszkurewicz

Maximal and stabilizing Hermitian solutions for discrete-time coupled algebraic Riccati equations O.L.V. Costa and R.P. Marques

Linear quadratic optimal control of time-varying systems with indefinite costs on Hilbert spaces B. Jacob

INFORMATION
Information on MCSS including tables of contents is
available at its home pages:
www.cwi.nl/~schuppen/mcss/mcss.html
www.math.rutgers.edu/~sontag/mcss.html

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Bradley Dickinson, Eduardo Sontag, Jan van Schuppen (Editors)

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

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA, volumes 292-293
Date: Thu, 10 Jun 1999

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Eigenvalue analysis of equilibrium processes defined by linear complementarity conditions A Seeger

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Lenear conditions for positive determinants JM Carnicer

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Feedback invariants of matrix quadruple completions I Zaballa

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Reverse order laws for generalized inverses of multiple matrix products
M Wei

URL: http://www.elsevier.nl/locate/jnlnr/07738

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

IPNet Digest Volume 6, Number 06 July 31, 1999

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

Today's Topics:
Special Session: Inverse Problems in Partial Diff. Equations
New Monograph: Inverse Problems of Vibrational Spectroscopy
Table of Contents: Linear Algebra and Its Applications

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

From: Andrzej Kedzierawski <kedziera@geneseo.edu>
Subject: Third World Congress of Nonlinear Analysts
Date: Thu, 15 Jul 1999

Dear Colleague,

The "Third World Congress of Nonlinear Analysts" (WCNA-2000) will be held at the University of Catania, Catania, Sicily, Italy during July 19-26, 2000. Catania (Sicily) is one of the most interesting cities from an archaeological, historical and artistic point of view with immense natural beauties.

For more information please see

http://www.fit.edu/AcadRes/math/wcna/wcna2000.htm

The organizers of this conference requested Professor Cornelis V. Van der Mee and myself to organize a special session of 45 minutes talks on

Inverse Problems in Partial Differential Equations.

Please inform us by e-mail cornelis@krein.unica.it or kedziera@uno.geneseo.cc.edu if you interested in participation in this special session or receiving printed information about the conference.

With Best Regards,

Andrzej Kedzierawski

From: "Professor Yagola" <yagola@inverse.phys.msu.su>
Subject: new monograph
Date: Thu, 15 Jul 1999

Dear colleagues,

I am very pleased to introduce our new monograph:

I.V. Kochikov, G.M. Kuramshina, Yu.A. Pentin and A.G.Yagola
"Inverse Problems of Vibrational Spectroscopy"

published by VSP in Inverse and Ill-Posed Problems Series.

The aim of this new volume in the Inverse and Ill-Posed Problems Series is to provide a consistent mathematical and physical treatment of empirical data processing in vibrational spectroscopy, based on the modern theory of nonlinear ill-posed problems.

The volume not only contains a clear and concise description of the foundation of the theory but also deals with applications of this theory. The straightforward mathematical formulation of model constraints as well as the use of various experimental data form the main issues in this book. Ab initio methods are briefly discussed, since these are likely to provide a good starting point for subsequent empirical data fitting. The data processing methods developed in this book provide empirical force fields which are compatible with experimental data as well as with certain model assumptions. Numerical methods and results of applications to different statements of inverse problems of spectroscopy are also given.

This book will be of interest to specialists in mathematics, physics, chemistry, and engineering who work with data processing in vibrational spectroscopy and/or the theory of ill-posed problems.

1999; x+298 pages
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VSP, P.O. Box 346, 3700 AH Zeist, The Netherlands
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More detailed information could be found at
www.vsppub.com

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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA Contents
Date: Mon, 26 Jul 1999

Linear Algebra and Its Applications July 1999 Vol. 294, Issue 1-3

The rational complementarity problem WPMH Heemels

Matrix recursive interpolation algorithm for block linear systems. Direct methods K Jbilou

Permanents and Lorentzian time-semidefinite matrices
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Simplicity of core arrays in three-way principal components analysis and the typical rank of PxQx2 arrays JMF Ten Berge

Asymptotic distribution of the spectra of a class of generalized kac-murdock-szego WF Trench

A short proof of the result on actions that characteriza in oo
MI Ostrovski

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A simple proof of the product theorem for EP matrices JJ Koliha

Two-stage iterative methods for consistent Hermitian positive semidefinite systems ZHIHAO Cao, HEBING Wu

Subspace iterative methods for eigenvalue problems
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Perron-frobenius type results and discrete versions of nodal domain theorems AM Duval, V Reiner

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Thiele-type and lagrange-type generalized inverse rational interpolation for rectangular complex matrices CHUANQING Gu

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Embedding a regular subpencil into a general linear pencil
FC Silva

On the distribution of eigenvalues of a simple undirected graph
XUERONG Yong

The linear algebra of the generalized Pascal functional matrix
M Bayat

Classification of path-recursive graphs MK Panttaja

Methods for constructing distance matrices and the inverse eigenvalue problem TL Hayden, RB Reams

On the operator equation ax=xax J Holbrook, E Nordgren

Nearly-defective complex eigenvalues in Bessel matrices

R Pavani

Semigroup ideals and linear diophantine equations A Vigneron-Tenorio

Similarity and matrics of constant rank JC Flick-D'Ornano

On analytic factorization of positive Hermitian matrix functions over the bidisc G Blower

Quaternionic modular groups NW Johnson

A basic exact sequence for the lee and euclidean weights of linear codes over z_1 KEISUKE Shiromoto

A variant of the Hausdorff theorem for multiindex matrices I
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Polynomial spaces over finite fields A Winterhof

An efficient algorithm for critical circuits and finite eigenvectors in the max-plus algebra GJ Oslder, C Roos

On rosenfeld's problem M Kuroda

On the matrix equation A^k=J-I Y Wu, Q Li

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IPNet Digest Volume 6, Number 07 August 31, 1999

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

Today's Topics:

Submissions for IPNet Digest:
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http://www.mth.msu.edu/ipnet

From: Bill Lionheart <Bill.Lionheart@umist.ac.uk>
Subject: British Workshops on Inverse Problems.
Date: Sun, 1 Aug 1999

The web site for the British Workshops on Inverse Problems has moved to http://www.ma.umist.ac.uk/bl/ukipws following my move from Oxford Brookes University to UMIST.

The next Workshop is provisionally planned for Monday October 25th 1999 at
UMIST Manchester
(http://www.umist.ac.uk).

Bill Lionheart

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British Workshops on Inverse Problems:
EIDORS and Electrical Impedance Tomography web sites have moved to http://www.ma.umist.ac.uk/bl/

From: flores@siam.org
Subject: PLEASE POST
Date: Tue, 10 Aug 99

Third SIAM Conference on Mathematical Aspects of MATERIALS SCIENCE
May 21-24, 2000
Crowne Plaza Hotel
Philadelphia, Pennsylvania

U.S.A.

The Call for Papers for the conference is now available on the Web. To obtain additional information, please visit:

www.siam.org/meetings/ms00/

or contact
SIAM, 3600 University City Science Center, Philadelphia, PA 19104-2688
Phone: 215-382-9800
Fax: 215-386-7999
E-mail: meetings@siam.org

From: ross@siam.org
Subject: Announcement
Date: Mon, 16 Aug 99

Please include the following brief announcement in the next publication of the IPnet Digest.

******

Eighth International Conference on Numerical Combustion March 5-8, 2000
Amelia Inn and Beach Club
Amelia Island, Florida

SEPTEMBER 1, 1999 -- Deadline for submission of minisymposium proposals and minisymposium speakers' abstracts

SEPTEMBER 15, 1999 - Deadline for submission of contributed abstracts for lecture or poster presentations

To obtain information on electronic submissions, please visit now the conference Web page at:

www.siam.org/meetings/nc00/

****
Darrell Ross
Conferences Program Manager
Society for Industrial and Appllied Mathematics

From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: for digest
Date: Wed, 11 Aug 1999

Software Competence Center Hagenberg, Austria

Call for Applications of Area Manager and other Personnel
in Industrial Mathematics

The Software Competence Center Hagenberg invites applications for

several positions (software engineers, project managers, area managers). The positions require at least a master's degree (Dipl.-Ing. in Austrian terminology) in applied mathematics, software engineering, computer science, computer engineering, or a closely related area. Software development experience in at least one of the areas mentioned below is expected.

The Software Competence Center Hagenberg (SCCH) is a competence center in the sense of the Kplus program of the Austrian Federal Government with an annual budget of around 4million US$. The SCCH is a cooperation of five institutes of the Johannes Kepler University in Linz (among them the Industrial Mathematics Institute), two branches of the Polytechnic University (FHS) in Hagenberg, and 15 companies working in various areas of software. The SCCH has started its work at the beginning of July 1999. It is located at Hagenberg (near Linz) in a lovely area of Upper Austria.

The goal of the SCCH is to pool competence in the areas
- software technology
- data base technology
- symbolic computation
- numerical computation
- knowledge based technology

by performing industrial and strategic research projects. The work in each of these areas is coordinated and controlled by an area manager under the guidance of a "key researcher".

This advertisement is specifically geared at recruiting personnel in the industrial-mathematics-branch of the SCCH; for these positions, experience in mathematical modelling and broad knowledge of numerical mathematics are required. For the position of area manager, a PhD would be expected.

Salary is commensurate with experience and qualifications. Applications, including a curriculum vitae and a statement detailing experiences and research interests should be sent to:

Dr. Klaus Pirklbauer
Software Competence Center Hagenberg
Hauptstrasse 99
A-4232 Hagenberg
Austria

Informal enquiries may also be directed to the "key researcher" of the industrial mathematics branch, Prof.Heinz W. Engl, EMail: engl@indmath.uni-linz.ac.at

Applications will be accepted until the positions are filled.

Prof.Dr.Heinz W. Engl E-Mail: engl@indmath.uni-linz.ac.at
Institut fuer Industriemathematik secretary:nikolaus@indmath.uni-linz.ac.at
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From: "PROF.HEINZ W. ENGL" <engl@indmath.uni-linz.ac.at>
Subject: for digest
Date: Wed, 18 Aug 1999

The 'Industrial Mathematics Competence Center' is a young and growing institution with the aim of developing mathematical methods and tools for the application in industry and business. It is located at the 'Institute for Industrial Mathematics' at the University of Linz (Austria).

For the Systems Identification Branch, we are looking for graduates in mathematics or a closely related field to be included in our scientific staff as soon as possible. Your activities will consist of the development and application of time-series- and system-identification-methods for the analysis and prediction of business data. The methods are developed for specific applications but should be applicable also in a more general context. The fields of application range from logistics to marketing.

You will have to deal with a great variety of different problems and will have to show a high sense of responsibility, while working in our young team. In case you have not attained a PhD and do want to achieve this degree in a subject related to the work, this will be a good occasion.

We expect your ability to work in a scientific context, excellent skills corresponding to communication and team-work, and of course commitment and dedication to the job.

Please submit your application including an indication of your idea of an appropriate salary and the earliest possible date of employment to:

Prof. Dr. Manfred Deistler,
Institute f. Econometrics, Operations Research and System Theory,
TU Wien, Argentinierstr. 8, A-1040 Wien, Austria.

Prof.Dr.Heinz W. Engl E-Mail: engl@indmath.uni-linz.ac.at
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From: james beck <jamesverebeck@home.com>
Subject: IPIE, no. 3
Date: Sun, 29 Aug 1999

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Estimating Damage in a Rod from Changes in Node Positions
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The Problem of Coefficients Identification in the Mathematical Model of
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Calculating Sensitivities of Thermal Systems with Uncertain Properties
using the Stochastic Finite Element Method and Finite Differencing
A.F. Emery and T.D. Fadale

From: Secretary Support - Magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Mon, 30 Aug 1999

Mathematics of Control, Signals, and Systems 1999 Vol. 12, No. 3
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Orthonormal basis functions for continuous-time systems and L^p
convergence H. Akcay and B. Ninness

INFORMATION
Information on MCSS including tables of contents is
available at its home pages:
www.cwi.nl/~schuppen/mcss/mcss.html
www.math.rutgers.edu/~sontag/mcss.html

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Bradley Dickinson, Eduardo Sontag, Jan van Schuppen (Editors)

Submitted by:
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(J.H.van.Schuppen@cwi.nl)

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Thu, 19 Aug 1999

Linear Algebra and Its Applications Sept. 1999 Vol. 296, Issue 1-3

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NOTE:
ContentsDirect lists the first author of each paper and the corresponding author (if different).

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IPNet Digest Volume 6, Number 08 September 30, 1999

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

Today's Topics:
Conference and Workshop on Inverse Problems
Int'l Symposium on Inverse Problems in Engineering Mechanics
16th IMACS World Congress 2000
SIAM Int'l Conference on Numerical Combustion
New Titles in Inverse and Ill-Posed Problems Series
Position: Chair at University of Maryland Baltimore County
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-Posed Problems

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

From: Otmar Scherzer <scherzer@indmath.uni-linz.ac.at>
Subject: Conference on Inverse Problems
Date: Fri, 17 Sep 1999

Conference on Inverse Problems

of the special research initiative
SFB F013 "Numerical and Symbolic Scientific Computation"
of the University of Linz (Austria)

in junction with

TMR-Workshop on Inverse Problems

The Workshop on Inverse Problems of the SFB will be held in the Erwachsenenbildungshaus in Strobl, Lake St. Wolfgang, Austria from June, 26th to July, 1st 2000.

Topics of this workshop include but are not limited to:
* Inverse Problems
* Ill-posed Problems
* Regularization Methods
* Optimal Control Problems
* Optimization

The following speakers have been invited and already mentioned their interest to take part at this conference:
* M. Hanke (University of Mainz, Germany)
* R. Hoppe (University of Augsburg, Germany)
* K. Ito (North Carolina State University, USA)
* M. Jaoua (University of Carthago, Tunis)
* R. Kress (University of Göttingen, Germany)
* K. Kunisch (University of Graz, Austria)
* P. Maass (University of Bremen, Germany)
* Z. Nashed (University of Delaware, USA)

* M. Pidcock (Oxford Brookes University, UK)
* F. Troeltsch (University of Chemnitz, Germany)
* J. Weickert (University of Mannheim, Germany)

In addition to the SFB workshop there will take place a TMR workshop (Training and Mobility of Researchers) funded by the European Union.
This is two days workshop on June 26th, 2000 and June 27th, 2000. Several Researches will give introductions in extended courses on Inverse Problems, Shape Optimization.
The following researchers have already confirmed to give extended courses:

* M. Bruehl (University of Mainz, Germany)
* H. W. Engl (University of Linz, Austria)
* C. Stangl (University of Linz, Austria)

Partcipants of the TMR workshop are welcome to participate also at the SFB Workshop on Inverse Problems.

If you are interested to participate and/or to contribute with a talk to this Conference please inform Thorsten Hohage (hohage@indmath.uni-linz.ac.at).
In case you are interested in participating exclusively at the TMR-workshop please contact Tom Felici (felici@indmath.uni-linz.ac.at).
Please note that there is only limited space available in the the Erwachsenenbildungshaus in Strobl.
Updated information on this conference will be available in the internet at http://imagewww.indmath.uni-linz.ac.at/sfb2000/

From: Masataka Tanaka <dtanaka@gipwc.shinshu-u.ac.jp>
Subject: Inverse Problems in Engineering Mechanics
Date: Thu, 2 Sep 1999

International Symposium on Inverse Problems in Engineering Mechanics
(ISIP2000)
March 7 - 10, 2000 at MIELPARQUE NAGANO, Nagano City, Japan

Organized by
Department of Mechanical Systems Engineering, Shinshu University, Japan

Co-Organized by
The University of Texas at Arlington, USA, and
Ecole Polytechnique, France

Sponsored by
Ministry of Education, Science, Sports and Culture, Japan

Co-sponsored by
Japan Society for Computational Methods and Engineering (JASCOME)

Chair
Prof. Tanaka, Masa., Shinshu University, Japan

Co-Chair

Prof. Dulikravich, G.S., The University of Texas at Arlington, USA

OBJECTIVES

Inverse Problems can be found in many topics of engineering mechanics. Following the first IUTAM Symposium in Tokyo held in May 1992, the second one in Paris held in November 1994, and the last successful Symposium in Nagano City held in 1998, we think it should be very fruitful to gather researchers and engineers again for exchange of the latest ideas and discussion on recent developments. The following general areas will be the subject of presentations and discussions at ISIP2000: mathematical and computational aspects of the inverse problems, parameter or system identification, shape determination, sensitivity analysis, optimization, material property characterization, ultrasonic nondestructive testing, elastodynamic inverse problems, thermal inverse problems, and other engineering applications.

SYMPOSIUM LOCATION

The Symposium will be held at Mielparque Nagano Hotel which is only five minutes walk from Nagano Station in Nagano City. Nagano City is located at the center of Japan's main island, Honshu, and about 90 minutes by a bullet train, called Shinkansen, from Tokyo. Nagano is surrounded by beautiful high mountains and it is famous for natural beauty and many hot springs. The 1998 Winter Olympic Games was held in this city.

OFFICIAL LANGUAGE

The symposium language is English.

CALL FOR PAPERS

Papers are invited on the topics related to the wide area of inverse problems in engineering mechanics. Contributors are requested to submit three (3) copies of an extended abstract not longer than four (4) single spaced pages of A4 format written in English. The abstracts should be submitted to the Symposium Secretariat by either by e-mail or by air mail. All accepted papers will be published in the proceedings after the Symposium.

IMPORTANT DATES

Deadline for extended abstract within 4 pages of A4 sheet:
October 15, 1999
Notification of acceptance: December 14, 1999
Deadline for final camera-ready manuscript: March 7, 2000
Conference: March 7-10, 2000

Note that during the symposium only a soft-cover volume of extended abstracts will be available. The symposium book of selected papers will be published by Elsevier Science after the symposium. The instructions for authors concerning the final camera-ready manuscript will in due course be sent to those whose extended abstracts are accepted for presentation at the Symposium.

SYMPOSIUM SECRETARIAT

Mr. Kim Sato
JASCOME Office
c/o Kozo Keikaku Engineering, Inc.
4-5-3 Chuo, Nakano-ku, Tokyo, 164-0011, Japan
TEL: +81-3-5342-1123, FAX: +81-3-5342-1223
E-mail: sato@kke.co.jp

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Prof. Nakamura, Masayuki, Shinshu University (Japan)

Prof. Nishimura, Naoshi, Kyoto University (Japan)
Prof. Onishi, Kazuei, Ibaraki University (Japan)
Prof. Tosaka, Nobuyoshi, Nihon University (Japan)
Prof. Yamamoto, Masahiro, University of Tokyo (Japan)

Those who are interested in this symposium are kindly requested to contact the secretariat via E-mail. Scientific queries should be sent to the Chair or the Co-Chair of the Symposium.

Prof. Masa. Tanaka, Chair
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Faculty of Engineering
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500 Wakasato, Nagano City, 380-8553, Japan
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E-mail: dtanaka@gipwc.shinshu-u.ac.jp

Prof. George S. Dulikravich, Co-Chair
Department of Mechanical and Aerospace Engineering
The University of Texas at Arlington
Arlington, TX 76019, USA
Fax: +1-817-272-5010, Tel: +1-817-272-2603
E-mail: dulikra@mae.uta.edu

ACCOMODATION
A block of rooms will be reserved for the Symposium at Mielparque Nagano Hotel which is only five minutes walk from Nagano Station. There are many other hotels in the nearby downtown of Nagano City. A list of the appropriate hotels could be found on the Symposium Web page in the future. Booking of accomodations should be made by directly contacting each hotel by phone or fax.

TRAVEL
There is a bullet train service from JR Tokyo Station to Nagano City. Trains leave every hour and arrive at Nagano Station in approximately 90 minutes. Japan Railways (JR) Tokyo Station is linked to Narita International Airport with train and bus services. The journey from the airport to JR Tokyo Station takes approximately 60 minutes by train service called Narita Express which leaves the airport every hour. Nagano City is also accessible by a bullet train from Nagoya, but the journey takes about 3 hours.

WEB PAGE OF SYMPOSIUM
More detailed information can be seen in the web page (http://homer.shinshu-u.ac.jp/ISIP2000/) of the Symposium.

Submitted by:
Prof. Masataka TANAKA
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From: Jennifer Collins <jcollins@ERC.MsState.Edu>
Subject: IMACS2000-ANUC session-second call
Date: Fri, 17 Sep 1999

16th IMACS WORLD CONGRESS 2000
on Scientific Computation, Applied Mathematics and Simulation
Lausanne, Switzerland, August 21-25, 2000

* http://www.imacs2000.eplf.ch
* http://www.sc.rutgers.edu/imacs

IMACS - The International Association for Mathematics and Computers in Simulation is an organization of professionals and scientists concerned with computers, computation and applied mathematics, in particular, as they apply to the simulation of systems. This includes numerical analysis, mathematical modelling, approximation theory, computer hardware and software, programming languages and compilers.

IMACS also concerns itself with the general philosophy of scientific computation and applied mathematics, and with their impact on society and on disciplinary and interdisciplinary research.

IMACS is one of the five international scientific associations (with IFAC, IFORS, IFIP and IMEKO) represented in FIACC.Theses five international organizations are representative of computers, automation, instrumentation and the relevant branches of applied mathematics. Of the five, IMACS (which changed its name from AICA in 1976) is the oldest, having been founded in 1956.

CALL for PAPERS for the Special Session
Applied Numerical Computing:
Grid Generation and Solution Methods for Advanced Simulations

* Scientific Organizer:
Dr.Rosa Maria Spitaleri
Istituto per le Applicazioni del Calcolo-CNR tel: 39(6) 88470254
Viale del Policlinico 137,00161 fax: 39(6) 4404306
Rome,Italy
e-mail:spitaleri@vaxiac.iac.rm.cnr.it

*Invited speaker:
Prof. Bharat Soni
Professor, Aerospace Engineering
Sr.CFD Lead ARL_ASC PET_MSRC
NSF Engineering Research Center
Mississippi State University, USA
e-mail:bsoni@erc.msstate.edu

This special session will provide a forum for exchanging research ideas involving theoretical and applied developments in numerical grid generation and solution methods for advanced simulations.

Papers are solicited on all aspects of grid generation (structured, unstructured, hybrid grids, surface generation, moving and adaptive techniques, etc.) and solution (finite difference, elements and volumes, etc.) of PDEs: theory, methodologies, algorithms and tool realizations, case studies, and applications are welcomed.

Presentations representing real world applications, which evaluate the effectiveness of new methodologies or computational approaches with respect to the traditional well proven techniques are encouraged.

*Deadlines

Papers are to be submitted in the form of an extended abstract of at most 2 pages in length. Deadline for submission is October 15, 1999. Papers submitted by that date will be decided upon no later than December 20, 1999.

*Financial support
There will be some financial support available for scientists from developing countries. The funds are likely to be very limited and participants should continue seeking alternative sources of funding.

Candidates for financial support should send a brief curriculum vitae (including date of birth and a list of publications) either by e-mail or conventional mail, before November 20, 1999.

*Registration fees
Authors and members of Cooperating Societies (ISGG, SIMAI, etc.) will receive a 10% discount on the following fees:

- before May 15, 2000 550 CHF.
- after May 15, 2000 650 CHF.

(fees include coffee break, gala dinner on boat, proceedings on CD-ROM and Congress programme book)

Registration fees for students 100 CHF.
(without social programme)

Submitted by:
Dr.Rosa Maria Spitaleri
Istituto per le Applicazioni del Calcolo-CNR
Viale del Policlinico 137,00161 Roma,Italy
tel: 39 (6) 88470254
fax: 39 (6) 4404306

From: ross@siam.org
Subject: Numerical Combustion Conference
Date: Wed, 08 Sep 99

Eighth International Conference on Numerical Combustion March 5-8, 2000
Amelia Inn and Beach Club
Amelia Plantation, Amelia Island, Florida

The deadline for submission of minisymposium proposals and minisymposium speakers' abstracts and contributed abstracts for a lecture or poster presentation has been extended.

The new deadline is SEPTEMBER 30, 1999.

For instructions and guidelines on how to submit your abstracts, please visit: www.siam.org/meetings/nc00/
and use our new electronic conference participation system. You may also e-mail your 75-word abstract to meetings@siam.org by using the LaTeX macro available at: www.siam.org/tex/confs/conftex.htm

Thank you and we look forward to your participation.

SIAM
e-mail: meetings@siam.org
phone: 215-382-9800
fax: 215-386-7999

Submitted by:
Darrell Ross, Conference Program Manager
Society for Industrial & Applied Mathematics
3600 Market St
University City Science Center
Philadelphia, PA 19104
ross@siam.org Phone:(215) 382-9800 Fax: (215) 386-7999
http://www.siam.org/meetings/

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: new titles in "Inverse and Ill-Posed Problems Series"
Date: Thu, 9 Sep 1999

Recently published in the "Inverse and Ill-Posed Problems Series":

Composite Type Equations and Inverse Problems
A.I. Kozhanov
1999; x+170 pages
ISBN 90-6764-305-X
DEM 175/USD 104/GBP 65
www.vsppub.com/books/mathe/bk-ComTypEquInvPro.html

Inverse Problems of Electromagnetic Geophysical Fields
P.M. Martyshko
1999; x+114 pages
ISBN 90-6764-306-8
DEM 124/USD 74/GBP 46
www.vsppub.com/books/mathe/bk-InvProEleGeoFie.html

Tables of contents of above books and information on other books in this book series can be found on http://www.vsppub.com/books/bs3.html

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From: seidman@pc14.math.umbc.edu
Subject: Chair at UMBC
Date: Tue, 14 Sep 1999

Chair, Department of Mathematics and Statistics
University of Maryland Baltimore County

The University of Maryland, Baltimore County (UMBC) invites applications for the position of the Chair of the Department of Mathematics and Statistics. The Chair is expected to lead the faculty in the development of the department's instructional and research programs, including the anticipated filling of several open faculty positions over the next few years. Candidates should have an earned doctorate in mathematics, statistics, or a closely related field, and be qualified for appointment at the rank of full professor. Committment to excellence in undergraduate and graduate education, possession of superior leadership and communication skills, and a

strong and active research program are required.

The department offers programs leading to the BA, BS, MS and PhD degrees in applied mathematics and MS and PhD in statistics. Currently there are 22 full-time faculty members, 25 full-time and 30 part-time graduate students, and 150 undergraduate majors. Further details can be obtained from the department's web site at http://www.math.umbc.edu.

UMBC is located just outside Baltimore and about 30 minutes from Washington DC, near major industries, federal laboratories and sponsoring agencies. It has a faculty of over 400 and a student body of approximately 10,000. The campus is in a growth mode and has several facilities under construction The campus's total research funding is approaching $50 million.

Candidates should submit a CV, a statement of professional goals, and the names, addresses and telephone numbers of four references to Dr. Geoffrey Summers, Chair of Math/Stat Search Committee, c/o Department of Mathematics and Statistics, UMBC, Baltimore, MD~21250. Screening of the candidates will begin in November 1999 and will continue until the position is filled. UMBC is an EOE/AA employer.

From: "Martin Beavis" <martin.beavis@ioppublishing.co.uk>
Subject: Inverse Problems, Volume 15, Issue 3
Date: Thu, 02 Sep 1999

Inverse Problems August 1999 Volume 15, Issue 4

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PAPERS

Identification of the load of a partially breaking beam from inclination measurements W Ring

Stability for an inverse boundary problem of determining a part of a boundary A L Bukhgeim, J Cheng and M Yamamoto

An inverse boundary value problem for the heat equation: the Neumann condition R Chapko, R Kress and J-R Yoon

A fast rebinning algorithm for 3D positron emission tomography using John's equation M Defrise and X Liu

A high-order perturbation approach to profile reconstruction: I. Perfectly conducting gratings K Ito and F Reitich

A convergence analysis for Tikhonov regularization of nonlinear ill-posed problems Jin Qi-nian

On reduced CKP equations I Loris

CORRIGENDA
Inverse problems with structural prior information
J P Kaipio, V Kolehmainen, M Vauhkonen and E Somersalo

Solving inverse problems for ordinary differential equations using the Picard contraction mapping H E Kunze and E R Vrscay

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WWW: http://www.iop.org

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: Journal of Inverse and Ill-Posed Problems, Vol. 7, No. 4
Date: Thu, 9 Sep 1999

Journal of Inverse and Ill-Posed Problems 1999 Vol. 7, No. 4
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An optical tomography-related time-domain inverse problem for the diffusion equation V.G. Romanov and S. He

Conference report: International Conference on Inverse Problems of Mathematical Physics

More information on this journal, such as contents of previous issues, instructions to authors, can be found on:
http://www.vsppub.com/journals/jn-JouInvIllPro.html

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IPNet Digest Volume 6, Number 09 October 31, 1999

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

Today's Topics:
Workshop: Bayesian Inference and Maximum Entropy Methods
Conference: SIAM Conf. Computational Science and Engineering
Conference: Numerical Analysis and Applications
Position: Postdoctoral Fellow in Inverse Problems in Vibration
Position: Chair in Applied Mathematics, Open University, UK
Table of Contents: Inverse Problems
Table of Contents: Journal of Inverse and Ill-Posed 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:
Mail to ipnet-request@math.msu.edu
http://www.mth.msu.edu/ipnet

From: Ali Mohammad-Djafari <djafari@lss.supelec.fr>
Subject: Annoncing MaxEnt2000 workshop
Date: Fri, 1 Oct 1999

Can you please annonce this workshop:

MaxEnt 2000
The Twentieth International Workshop on
Bayesian Inference and Maximum Entropy Methods in Science and Engineering

http://www.nd.edu/~adjafari/me2000.htm

will be held in France under the auspices of Centre National de la Recherche Scientifique (CNRS), Universite de Paris--Sud, Orsay and Ecole Superieure d'Electricite (Supelec).

MaxEnt 2000 strives to present Bayesian inference and Maximum Entropy methods in data analysis, information processing and inverse problems from a broad range of diverse disciplines: Astronomy and Astrophysics, Geophysics, Medical imaging, Non Destructive Evaluation, Particle Physics, Physical and Chemical measurement techniques, Economics and Econometrics, etc. Special interest will be given to Bayesian inference applications in: Inverse problems, Data Fusion, Time series analysis, spectral estimation, Deconvolution, Source Separation, Segmentation, Classification and Pattern Recognition, X-ray, Diffractive and Diffusive Imaging and Quantum Tomographic, etc.

The workshop includes a one day tutorial session (Sunday July 9, 2000), state of the art lectures, invited papers, contributed papers, and poster presentations. The official languages will be French and English. Selected papers by the program committee will be edited in a book. All the papers will be in English with a bilingual summary. Translation assistance will be provided for the summary translations.

Contributed papers relating the above topics are being

solicited. Especially encouraged are papers whose content is novel, either as to approach or area of application. Abstracts (one page of about 400 words) of the proposed papers should be received by the conference secretariat on March 30, 2000.

You will find all the complementary information about this workshop in :
http://www.nd.edu/~adjafari/me2000.htm
or by contacting the organizer: djafari@lss.supelec.fr
If interested, please fill the preliminary registration form on the web site early. The number of participants will be limited to 100.

Thanks in advance

Ali Mohammad-Djafari
Laboratoire des Signaux et Systemes (CNRS-SUPELEC-UPS)
Ecole Superieure d'Electricite
Plateau de Moulon, 91192 Gif-sur-Yvette Cedex, France.
Tel: 33- 1- 69 85 17 41
Fax: 33- 1- 69 41 30 60
E-Mail: djafari@lss.supelec.fr

From: flores@siam.org
Subject: SIAM Conf. on Computational Science and Engineering
Date: Fri, 22 Oct 1999

First SIAM Conference on Computational Science and Engineering
September 21-23, 2000
Wyndham City Center Hotel
Washington, DC

Conducted by the Society for Industrial and Applied Mathematics

Proposals for minisymposium and abstracts for contributed presentations are welcome.

For additional information about the conference and how to participate, please visit:

www.siam.org/meetings/cse00/

From: Jennifer Collins <jcollins@ERC.MsState.Edu>
Subject: Second Conference on Numerical Analysis and Applications
Date: Tue, 19 Oct 1999

SECOND CONFERENCE ON NUMERICAL ANALYSIS AND APPLICATIONS

June 11-15, 2000

organized by the University of Rousse, Bulgaria in cooperation with
SIAM and endorsed by the International Linear Algebra Society

This conference is second in a series. The first one (organized in-cooperation with SIAM) was held in June 24-28, 1996 at the University of Rousse. There were more than 80 participants from 22 countries all over the world. In addition to more than 30 participants from Bulgaria, about 20 participants were from Eastern European countries. In this way the meeting turned out to be a good place for exchange of ideas between East and West. The refereed proceedings of

the first meeting were published by Spinger Verlag in the Lecture Notes in Computer Science series (vol. 1196).

The main tracks of the conference are:

1. Numerical Linear Algebra.
2. Numerical Methods for Differential Equations.
3. Numerical Modeling.
4. High Performance Scientific Computing.

The preliminary list of Keynote Speakers who accepted our invitation:

G. Akrivis (Greece), V. B. Andreev (Russia), R. Chan (Hong Kong), F. Chatelin (France), I. Dimov (Bulgaria), I. Duff (UK), R. Freund (USA), A. V. Goolin (Russia), A. Griewank (Germany), P. C. Hansen (Denmark), P. W. Hemker (Netherlands), B. Jovanovich (Yugoslavia), M. Kaschiev (Bulgaria), Yu. A. Kuznecov (USA - Russia), R. D. Lazarov (USA - Bulgaria), F. Luk (USA), J. J. Miller (Ireland), H. G. Roos (Germany), V. V. Shaidurov (Russia), G. I. Shishkin (Russia), E. E. Tyrtyshnikov (Russia), P. N. Vabishchevich (Russia), P. Vassilevski (Bulgaria-USA)

Important deadlines:

Feb 1, 2000 - abstracts (about half a page) and propositions for organizing minisymposia on a given topic

March 1, 2000 - notification of acceptance

March 15, 2000 - full papers (not more than 12 pages for the Key Speakers, and 8 pages for the rest of the speakers)

June 30, 2000 - final version of papers

We expect the abstract andi the paper to be written in Latex. We plan to publish the proceedings with Springer again. Therefore, please use the Latex Spinger files for LLNCS (Lecture Notes in Computer Science) at http://www.springer.de

REGISTRATION FORM

Name ----------
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Contact Adress:----------
City----------Zip/Postal Code:---------- Country:-------
E-mail----------Fax----------

I intend to:
submit a paper to Section ----------
present a poster ----------
present a talk ----------
propose a minisimposim on ----------

Please send a printed copy and a PS file of the paper to

Tracks 1 and 4:
Plamen Yalamov
University of Rousse

7017 Rousse
Bulgaria
e-mail: yalamov@ami.ru.acad.bg

Tracks 2 and 3:
Lubin Vulkov
University of Rousse
7017 Rousse
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e-mail: vulkov@ami.ru.acad.bg

For more information contact:
Marcin Paprzycki (marcin@orca.st.usm.edu)
Lubin Vulkov (vulkov@ami.ru.acad.bg)
Plamen Yalamov (yalamov@ami.ru.acad.bg)

The mirror WWW sites are located at:
http://unidhp.uni-c.dk/~yalamov/conferences.html
http://orca.st.usm.edu/marcin/mp/cfp/rousse00/rousse00.html

From: Graham Gladwell <ggladwel@workbench.uwaterloo.ca>
Subject: Postdoctoral Fellow in Inverse Problems in Vibration
Date: Wed, 27 Oct 1999

Professor G.M.L.Gladwell of Department of Civil Engineering, University of Waterloo, Waterloo, Ontario, Canada, N2L 3G1, wants to hire a postdoctoral fellow in the general area of Inverse Problems in Vibration. Applicants should be familiar with the field, and have expertise in Matrix Analysis. They are asked to send a brief bio,and a description of their current research interests, preferably by email to ggladwell@uwaterloo.ca

Graham Gladwell.

From: "Dr. R. Hasson" <R.Hasson@open.ac.uk>
Subject: Chair in Applied Mathematics at the Open University, UK.
Date: Mon, 11 Oct 1999

BUILDING ON 30 YEARS OF SUCCESS!

The Open University invites applications for a Chair in Applied Mathematics - as part of a major commitment to strengthen both research and teaching in Applied Mathematics.

You should have an excellent record of research publication and of teaching at a range of levels, academic leadership qualities (proven or potential), and a vision for our curriculum development.

You will have an opportunity to build a strong research team: we are making available at least one additional Lectureship and one additional Lectureship/Senior Lectureship, to be filled following your appointment. Your leadership qualities are more important than your precise research area, but we would particularly welcome your application if you work in non-linear dynamics, quantum mechanics or numerical analysis of dynamical systems.

You will lead the Department that teaches more Applied Mathematics students than any other UK University, with impressive multi-media

resources to ensure that your courses are at the forefront of current teaching and learning technologies.

Salary will be in the professorial range minimum £36,401 according to academic attainment and experience.

The post is based in Milton Keynes. Confidential informal enquiries may be made of Professor David Brannan (Tel: +44 (0)1908-652892; email: d.a.brannan@open.ac.uk). Further particulars of the post and the application process may be obtained from Ms J Barker (Department of Applied Mathematics, The Open University, Walton Hall, Milton Keynes, Bucks MK7 6AA, UK; Tel: +44 (0)1908-653580; email: j.barker@open.ac.uk). Access details for disabled applicants may also be obtained on this number.

The closing date for applications is 5th November 1999. Shortlisted candidates will be invited to visit the Department in late November/early December, and interviews will be held on 16th December 1999.

Disabled applicants whose skills and experience meet the requirements of the job will be interviewed. Please let us know if you need your copy of the further particulars in large print, on computer disk, or on audio cassette tape. Hearing impaired persons may make enquiries on Milton Keynes (01908) 654901 (Minicom answerphone). Equal Opportunity is University Policy.

The University offers a wide range of jobs with excellent training and career development opportunities. We actively promote equal opportunities in education and employment and welcome applications from all sections of the community.

Further details: http://www.open.ac.uk/employment/

From: "Martin Beavis" <martin.beavis@ioppublishing.co.uk>
Subject: Inverse Problems, Volume 15, Issue 5
Date: Wed, 06 Oct 1999

Inverse Problems October 1999 Volume 15, Issue 5

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Submitted by: Martin Beavis, Production Editor
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WWW: http://www.iop.org

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: Journal of Inverse and Ill-Posed Problems, Vol. 7, No. 5
Date: Thu, 7 Oct 1999

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On reconstruction of the speed of sound from a part of boundary
L.N. Pestov

More information on this journal, such as contents of previous issues, instructions to authors can be found on:
http://www.vsppub.com/journals/jn-JouInvIllPro.html

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From: James Beck <jamesverebeck@home.com>
Subject: Inverse Problems in Engineering
Date: Sat, 16 Oct 1999

Inverse Problems in Engineering 1999 Vol. 7, Number 4
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From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Sat, 23 Oct 1999

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OMC for householder reflections SW Drury

Column optimal strongly three-fold orthogonal matrices in a class index eight AS Hedayat, H Pesotan

Littlewood's algorithm and quaternion matrices DI Merino

Submitted by:
Hans Schneider hans@math.wisc.edu.
Department of Mathematics 608-262-1402 (Work)
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IPNet Digest Volume 6, Number 10 November 30, 1999

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

Today's Topics:
Postdoctoral Position: Computational Inverse Problems
Tenure-Track Position: Applied Math, Computer Science
Newsletter: International Society of Grid Generation
Call for Papers: Far East Journal of Applied Mathematics
Table of Contents: Linear Algebra and Its Applications

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

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

From: Curt Vogel <vogel@gauss.math.montana.edu>
Subject: Postdoc in Computational Inverse Problems
Date: Mon, 8 Nov 1999

Montana State University
Postdoctoral Research Position in Computational Inverse Problems

The Department of Mathematical Sciences at Montana State University invites applications for a 2-year postdoctoral research position dedicated to Computational Methods in Atmospheric Optics, to begin Aug. 20, 2000. Funding has been awarded to the University and is being administered through the US Air Force Office of Scientific Research. Collaborative work will be carried out with the USAF Starfire Optical Range in New Mexico and the Maui High Performance Computing Center in Hawaii.

A PhD in Computational or Applied Mathematics, Optical Sciences, or related field is required by start date. Experience programming in MATLAB or C++ is essential. Applicants should have expertise in one of the following three areas, as well as some familiarity with the other two: 1) Computational methods for Inverse Problems; 2) Mathematical models for the propagation of light through the atmosphere; and 3) High performance computing. More information is available on the web at http://www.math.montana.edu/~vogel/Postdoc.

Send letter of interest, curriculum vita, and three letters of recommendation to: Curtis R. Vogel, Dept. of Mathematical Sciences, Montana State University, Bozeman, MT 59717-2400. ADA/AA/EO/Vet. Pref.

From: Yair Censor <yair@mathcs2.haifa.ac.il>
Subject: Annonuncment of a position in the Department of Mathematics of the
University of Haifa, Israel.
Date: Thu, 11 Nov 1999

The Department of Mathematics of the University of Haifa, Israel, expects to have an opening for a tenure-track position beginning in

October 2000. The position will be for an applied mathematician or a computer scientist. Fields connected with high-tech industries are preferred. Candidates must hold a Ph.D. in mathematics or computer science, and have an excellent record in research and teaching.

The position will require teaching of computer science courses in a BA program of "Mathematics with Computer Science"; thus, the candidates must have a proven record of teaching such courses, and must have a reasonable command of the Hebrew language.

Remark: the University of Haifa has an independent Department of Computer Science which is not part of the above mentioned program and of this announcement.

Please send a letter of application, which addresses your suitability for the position described above, a complete CV and list of publications. In addition, please have three letters of recommendation sent directly to us. The whole material should be addressed to

Professor Izu Vaisman, Chairman
Department of Mathematics
University of Haifa
Mt. Carmel, Haifa 31905, ISRAEL.

From: Jennifer Collins <jcollins@ERC.MsState.Edu>
Subject: ISGG Newsletter: Address request
Date: Tue, 9 Nov 1999

Dear Colleague,

We are preparing to send out hardcopies of the latest International Society of Grid Generation (ISGG) Newsletter. ISGG's main objective is to promote, foster, organize and coordinate various activities in grid generation. The ISGG Newsletter reports research activities in grid generation from around the world. If you are interested in receiving this newsletter and/or information on upcoming grid generation conferences, please send me your preferred mailing address. (More information regarding ISGG can be found at the ISGG website: http://www.isgg.org .)

Thank you,

Jennifer
Editorial Assistant
NSF ERC at MSU
Engineering Research Center Fax: (662)325-7692
Mississippi State University Tel: (662)325-7964
P.O. Box 9627 Email: jcollins@erc.msstate.edu
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Dr. Bharat Soni
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Sr.CFD Lead ARL, ASC & ERDC MSRC :(662)325-8278
NSF Engineering Research Center Cell:(662)418-0006
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P.O.Box 9627 Email : bsoni@erc.msstate.edu
Mississippi State,MS 39762
http://www.erc.msstate.edu/~bsoni
FedEx/UPS Address: 2 Research Blvd, Starkville, MS 39759

From: "Pushpa Publishing" <pph@nde.vsnl.net.in>
Subject: Call for papers FJAM
Date: Tue, 30 Nov 1999

It is a pleasure to inform you that the PUSHPA PUBLISHING HOUSE has launched the publication of the FAR EAST JOURNAL OF APPLIED MATHEMATICS with effect from 1997. The April issue No. 1 and the August issue No. 2 of Vol. 3(1999) FJAM has been released. The November issue Number 3 of Volume 3(1999) is ready for release in December 1999. The journal is published in three issues per volume annually appearing in April, August and November. The thrust areas are Differential Equations, Mathematical Methods in Physics, Graph Theory, Game Theory, Biomathematics, Bifurcation Theory, Fluid Mechanics, Wavelet Theory, Plasma Mechanics, Magnetohydrodynamics, Lattice Dynamics, Dynamical Systems and Splines.

At present the Editorial Board has Professors Ho-Young Kwak (Chung-Ang University, Korea), K. A. Helmy (Oman), So-Hsiang Chou (Bowling Green State University, USA), Atusi Tani (Keio University, Japan), Gisele Goldstein (University of Memphis, USA), T. Bryant Moodie (University of Alberta, Canada), Balram Dubey (Tezpur University, India), Sam Melkonian (Carleton University, Canada), U. N. Das (Gauhati University, India), Young-Chel Kwun (Dong-A University, Korea), Philip L.-F. Liu (Cornell University, USA), Hong Tae Shim (Sunmoon University, Korea), Soon-Yeong Chung (Sogang University, Korea), Kjell Holmaker (Chalmers University of Technology and Goteborg University, Sweden), K. S. Harinath (Bangalore University, India), Mohammedi R. Abdel-Aziz (Kuwait University, Kuwait), Koji Ohkitani (Kyoto University, Japan) and Kazuhiro Sakai (Kanagawa University, Japan) as its members with K. K. Azad (University of Allahabad, India) as the Principal Editor.

Those who have contributed to the FJAM by now include S. R. Grace, U. N. Das, B. Dubey, A. E. Radwan, Young-Chel Kwun, Jin-Mun Jeong, Jong-Seo Park, Bae-Jun Ko, S. M. Abu Zour, Kemei Zhang, Kazuhiro Sakai, Chul-Yun Park, Jong-Yeoul Park, A. A. El-Bary, Eman H. Al-Shemas, N. Ch. S. N. Iyengar, K. C. Deshmukh, E. A. S. El Sedy, E. M. El Shobaky, G. Saldanha, Robert A. Hermann, Wen Xiang Sun, Kazuhisa Kato, Zaki F. A. El-Raheem, Labib R. Awad, Shobhy E. Ibrahim, Mohammedi R. Abdel-Aziz, Yuanqing Li, Ashok Ganguly, Elizabeth Mathai, D. N. Riahi, R. N. Mohan and M. Sofy.

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h. Existence of the solution and coupled minimal and maximal quasi-solutions of nonlinear mixed type impulsive integro-differential equations in Banach spaces by Kemei Zhang and Xuejun Xie

i. A numerical method of some singular integral equations in the dynamic elastic problems by M. A. Abdou and S. A. Hassan

j. A numerical scheme for the exact boundary control of parabolic partial differential equations by Bishri A. Abdel-Hamid

k. On spherically symmetric conformal space times by T. M. Karade and K. T. Thomas

l. Existence of periodic solution for n-th order nonlinear delay differential equation by Genqiang Wang and Jurang Yan.

The No. 2 of Vol. 3(1999) FJAM pp 137-246

a. A note on upper multiexponents by Zhou Bo

b. Antisymmetric stress tensor models for magnetic fluid with and without couple stress by D. K. Wagh and A. Avashia

c. Generalized Gaussian quadrature formulas for tchebycheff systems by Ying Guang Shi

d. Double-diffusive convection in a viscoelastic fluid-filled high-porosity medium by P. G. Siddheshwar and C. V. Sri Krishna

e. Effect of over population on forestry biomass: A mathematical model by M. Agarwal and N. Mishra

f. On spherically symmetric quantities of V5 by T. M. Karade and K. T. Thomas

g. On character vector wa for the spherically symmetric space time V5 by T. M. Karade and K. T. Thomas

h. Simple systems with complex dynamics by K. Sundaravadivelu and P. Kandaswamy

i. Radiation from a spherical acoustic source near a scattering prolate spheroid as a parameter expansion of the acoustic pressure of a spherical scatterer by Thomas M. Acho

j. Approximate solutions of initial value problems using quartic splines by Hamdi O. Elmoselhi

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a. The existence of fuzzy optimal control for the nonlinear fuzzy differential system by Jum-Ran Kang, Seon-Yu Kim and Young-Chel Kwun

b. Free convective steady flow and heat transfer in a viscous incompressible fluid confined between a long vertical wavy wall and a parallel flat wall of equal transpiration by A. Aziz, U. N. Das and S. Ahmed

c. Maximum principles for semilinear elliptic partial differential equations by Mohammad Mujalli Al-Mahameed

d. Unsteady MHD free convective flow through a porous medium by A. Aziz, U. N. Das and M. Rahman

e. Propagation of spherical magneto-gasdynamic shock wave with varying energy in a rotating, gravitating, non-uniform atmosphere by Ashok Ganguly and Mrinal Jana

f. Operateurs de Hilbert et bases d'ondelettes sur un intervalle by M. Nadir

g. Perturbation of products of general quasi-differential expressions by Sobhy El-Sayed Ibrahim

h. A geometric study for soliton equations in 2+1 dimensions by M. El-Sabbagh, S. El-Ganaini and M. Ragab

Articles which are accepted for publication include those from E. M. Elabbasy, Jong Bae Choi, A. K. Khamis, N. Ch. S. N. Iyengar, Jong Duek Jeon, O. D. Makinde, S. H. Saker and K. Saif.

As per proposed policy of the journal papers received for consideration of publication are processed immediately and referees are requested to pass on their reports within two months and in case of a clear recommendation for publication an effort to accommodate the paper in an earlier issue of the journal will be made. The papers in duplicate with a letter of submission may be submitted at the following address:

THE EDITORS

FAR EAST JOURNAL OF APPLIED MATHEMATICS
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http://www.pphmathjournals.com

Every paper must contain an abstract and latest Mathematics Subject Classification Numbers.

Papers appearing in the FAR EAST JOURNAL OF APPLIED MATHEMATICS are reviewed in the Mathematical Reviews and also in the Zentralblatt fur Mathematik.

Because the publication is its initial stage, the publishers have to depend heavily upon the print charges and the purchase of additional sets of reprints of accepted papers. Therefore, the authors are requested to arrange print charges of their papers at the rate of US$ 25.00 per page from their institution or the research grants. Twenty-five reprints of a paper are provided to the author(s) ex-gratis.

It is a pleasure for me to request you to contribute a paper of your interest in our journal and also to promote the journal among your fellow-workers and colleagues.

With kind regards,

Sincerely yours

K. K. Azad
Principal Editor
Far East J. Appl. Math.
Professor of Mathematics
University of Allahabad, India
e-mail:pph@vsnl.com.
pph@nde.vsnl.net.in
http://www.pphmathjournals.com

OTHER PUBLICATIONS:

1. FAR EAST JOURNAL OF MATHEMATICAL SCIENCES (FJMS)
   ISSN 0972-0871
2. FAR EAST JOURNAL OF THEORETICAL STATISTICS
   ISSN 0972-0863
3. FAR EAST JOURNAL OF DYNAMICAL SYSTEMS

ISSN 0972-1118

Following is a brief introduction of our journals:

1. The 1999 FAR EAST JOURNAL OF MATHEMATICAL SCIENCES (FJMS) has completed its Volume 1(1999) in six issues and a 1999 Special Volume devoted to Geometry and Topology in three parts. The January issue Number 1 of Volume 2(2000) is ready for release in November 1999. In 2000 also, it is proposed to bring out a special volume in three parts consisting of papers in the current areas of interest in Geometry and Topology. The regular issues of the FJMS consider articles in every branch of Pure and Applied Mathematics, Applied Statistics and Computer Applications. Survey articles are also considered. Volume 2(2000) of the Far East Journal of Mathematical Sciences (FJMS) will be published in six issues.

2. FAR EAST JOURNAL OF THEORETICAL STATISTICS has completed its Vol. 3(1999) successfully in time. The journal is published in two issues per volume annually appearing in July and December. Depending upon the sincere help and support received from the learned members of the editorial board of the FJTS and the learned referees of the submitted papers, we plan to increase the number of issues in the FJTS from two to three appearing in March, July and December with effect from 2000. The thrust areas are Inference, Bayesian Analysis, Multivariate Analysis, Sequential Analysis, Stochastic Processes, Bootstrap, Wavelets, Probabilities, Mathematical Statistics, Econometrics, Time Series, Nonparametric, Markov Processes among others.

3. FAR EAST JOURNAL OF DYNAMICAL SYSTEMS is proposed for publication as a new journal which will appear in 1999 in one issue but from year 2000 it will appear in two numbers in a volume published annually in May and November. Each volume is likely to comprise of 300 pages and consist of duly refereed original research papers and survey articles in the field of Differential Equations and Dynamical Systems. The Editorial Board for this journal is in process of constitution and it is expected to take a final shape soon. Till date Professors N. P. Bhatia (University of Maryland Baltimore County, USA), Florin N. Diacu (University of Victoria, Canada), Mohamed Sami El-Bialy (Toledo University, USA), Xiao-Biao Lin (North Carolina State University, USA), Kazuhiro Sakai (Kanagawa University, Japan), Dan Offin (Queen's University at Kingston, Canada), Arkady Tempelman (Penn State University, USA), Hani Reda Farran (Kuwait University, Kuwait), Noboru Kunimatsu (Keio University, Japan) and Wenxian Shen (Auburn University, USA) have given their consents to serve as members on the Editorial Board of the FJDS.

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Wed, 3 Nov 1999

Linear Algebra and Its Applications Nov. 1999 Vol. 199, Issues 1-3

A block en algorithm for nonsymmetric linear systems with multiple right-hand sides Guiding Gu

Computing the singular value decomposition with high relative accuracy J Demmel

Potentially nilpotent sign pattern matrices CA Eschenbach

Self-adjoint operators and pairs of Hermitian forms over the quaternions M Karow

Feedback design for regularizing descriptor systems
A Bunse-Gerstner, V Mehrmann

The moment and gram matrices, distinct eigenvalues and zeroes, and rational criteria for diagonalizability RA Horn

A characterization of triangularizability of a linear associative algebra Wenxue Huang

Convergent multiples of convergent operators B Cain

Hook immanantgal inequalities for Hadamard's function ONN Chan

An algebraic proof opf a result by Gonzaga and Lara KD Ikramov

A note on *orthant-monotonic norms B Lavric

Submitted by:
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IPNet Digest Volume 6, Number 11 December 29, 1999

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

Today's Topics:
Workshop: Inverse Problems and Nonlinearity
Seminar: Tenth Inverse Problems in Engineering Seminar
Inverse Problem Minisymposium: British Appl. Math. Colloquium
Symposium: Advances in Computational Heat Transfer
SIAM Conference: Applied Linear Algebra
Table of Contents: Journal of Inverse and Ill-Posed Problems
Table of Contents: Inverse Problems in Engineering
Table of Contents: Mathematics of Control, Signals, & Systems
Table of Contents: Linear Algebra and Its Applications

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

From: Colloque Inverse Problems - JG Caputo <rcp264@LPM.univ-montp2.fr>
Subject: Colloque Problemes Inverses
Date: Tue, 21 Dec 1999

Dear Colleague,

You will find below the official announcement and CALL FOR PAPERS
(with special characters set in latex format) of the RCP264 workshop

RCP264: INVERSE PROBLEMS AND NONLINEARITY, THEORY AND APPLICATIONS

http://www.lpm.univ-montp2.fr:7082/~rcp264/

to be held at the University of Montpellier II (France) from
June 20 to 24, 2000.

Thank you.

Sincerely yours,
Jean Guy Caputo

INVERSE PROBLEMS AND NONLINEARITY, THEORY AND APPLICATIONS
Universit\'e Montpellier II (France)
June 20-24, 2000

CALL FOR PAPERS

30 years ago Pierre Sabatier started the RCP264 as an annual meeting on the emerging field of inverse problems. The subject has since grown tremendously and become truly pluri-disciplinary involving pure and applied mathematics, physics, numerical analysis, geophysics and signal analysis to mention just a few components. Initially an off-shoot of inverse problems, the theory of inverse scattering for non linear wave equations has developed considerably due to the

combination of analysis and computations.

In the spirit of RCP264, the purpose of the workshop is to bring together scientists from both fields interested in tackling practical problems via theoretical methods and numerical algorithms, in the very pleasant setting of the University of Montpellier in southern France.

Both inverse scattering and general inverse problems will be considered with applications in acoustics, geophysics, mathematical physics and mechanics. Specific topics will cover ill-posed problems, variational methods and spectral techniques, as well as model identification and shape optimization. The list is to be considered open especially regarding new applied mathematics methods or computations.

The workshop will also be the occasion to celebrate Pierre Sabatier's 65th birthday and his active engagement in the promotion of Inverse problems through the RCP264 and the Journal "Inverse Problems".

The members of the scientific advisory committee are listed below. They will help us selecting lectures if necessary. As in the previous workshops, lecturers are urged to make a pedagogical effort in order to be understood by people of various fields, and all newcomers are encouraged to present their own interest in inverse problems and inverse methods. The workshop will take place from Tuesday June 20 2000 to Saturday June 24th 2000 at the Universit\'e de Montpellier II in the beautiful medieval city of Montpellier on the Mediterranean, easily accessible by air or train.

The registration fee is 600 ff (less than 100 USdollars at the current rate). The organizers have selected hotels where participants will find accommodations.

Persons interested in participating can receive the following announcements with additional details by sending an email indicating their affiliation and (if possible the title of their contribution) to:

Workshop secretaries:
Odile Albernhe, Rejane Bistu\'e and Fran\c coise Duceau
Laboratoire de Physique Math\'ematique, 34095 Montpellier cedex, France.
Tel 33 4 67 14 4697
fax 33 4 67 54 48 50
email: rcp264@lpm.univ-montp2.fr
http://www.lpm.univ-montp2.fr:7082/~rcp264

Organizer: Jean Guy Caputo, Laboratoire de Physique Math\'ematique

Scientific advisory committee

M. Cuer, Laboratoire d'Analyse convexe, Montpellier,France.
M. Daignieres, Laboratoire de G\'eophysique, Montpellier,France
H.W. Engl, Mathematik, University of Linz, Austria.
L. Faddeev, Steklov Institute, St.Petersburg, Russia.
Y. Gaididei, Institute of theoretical Physics, Kiev, Ukraine.
A. Grunbaum, Mathematics, University of California, Berkeley, USA.
V. Isakov, Mathematics & Statistics ,Wichita State University , U.S.A.
D. Kaup, Physics, Clarkson University, NY, USA.
J. Leon, Physique Math\'ematique, Montpellier, France.
D. Lessellier, Signaux et Syst\`emes, Ec. Sup. Elec., France.
A. Louis, Mathematik, University of Sarrebruck, Germany.
A. Nachman, Mathematics, University of Rochester, USA.
R.G Newton, Physics, Indiana University, USA.
A. Osborne, Oceanografia Fisica, Universit\`a di Torino, Italy.
E.R. Pike, F.R.S., J.C.Maxwell Professor, King's college, London, UK.
W. Rundell, Mathematics, Texas A & M University, College Station, USA
A. Shabat, Landau Institute for theoretical physics, Moscow, Russia.

From: james beck <jamesverebeck@home.com>
Subject: Tenth Inverse Problems in Engineering Seminar
Date: Wed, 29 Dec 1999

Tenth Inverse Problems in
Engineering Seminar

Monday, June 5 - Tuesday, June 6, 2000
The University of Texas at Arlington
Arlington, Texas

About the Seminar
The Tenth Inverse Problems in Engineering Seminar is the continuation of the informal seminars which were initiated at Michigan State University in 1987. This seminar will be sponsored by the School of Engineering and the Department of Mechanical and Aerospace Engineering at The University of Texas at Arlington.

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.

Presentations will be informal twenty minute talks. In addition, there will be forty minute invited talks by:

· Professor James V. Beck, Professor emeritus, Department of Mechanical Engineering, Michigan State University
· Professor George Dulikravich, Department of Mechanical and Aerospace Engineering at The University of Texas at Arlington
· Professor A. T. Watson, Department of Chemical Engineering, Texas A&M

University
· A guest speaker

If the number of submissions warrants additional program time, a poster session will be included.

How to Register or Submit a Paper
The seminar fee is $65. This fee includes continental breakfast both days of the seminar, a Texas barbecue on Monday evening, and a copy of the proceedings. If you are interested in registering for this conference, please contact a co-chair listed below to receive registration material. If you would like to submit a paper, please submit a tentative title and an abstract by March 15, 2000. Send titles and abstracts or other inquiries to:

Keith A Woodbury, Professor
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From: Bill Lionheart <Bill.Lionheart@umist.ac.uk>
Subject: British Applied Mathematics Colloquium, 25th-28th April 2000
Date: Thu, 02 Dec 1999

BAMC 2000
British Applied Mathematics Colloquium, 25th-28th April 2000
UMIST Manchester, UK.

This year's BAMC is open to all with an interest in the applications of mathematics; we invite mathematicians, engineers, physicists and all others interested, from universities, industry, research establishments and colleges. We hope the talks and posters will represent both traditional and emerging applications of mathematics and particularly encourage younger researchers to attend the meeting and contribute talks.

There will be a Mini-symposium on Inverse Problems provisionally scheduled for Wed 26th April in the morning. There are still slots available for speakers so please e-mail me if you are interested in contributing.

The BAMC 2000 web site is http://www.ma.umist.ac.uk/bamc/

Bill Lionheart

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British Workshops on Inverse Problems:
EIDORS and Electrical Impedance Tomography web sites

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

From: "CHT'01 - Graham de Vahl Davis" <cht01@cfd.mech.unsw.edu.au>
Subject: Second Announcement: CHT'01
Date: Mon, 27 Dec 1999

ANNOUNCEMENT AND CALL FOR PAPERS

CHT'01: 2ND ICHMT SYMPOSIUM ON
ADVANCES IN COMPUTATIONAL HEAT TRANSFER

20-25 May 2001, Palm Cove, Queensland, AUSTRALIA

OBJECTIVE: The goal of the symposium is to provide a forum for the exposure and exchange of ideas, methods and results in computational heat transfer. While papers on all aspects of computational heat transfer are welcome, contributions are especially invited on:

internal flow and heat transfer
- ducts, cavities, compact heat exchangers, etc.
boundary layer flow and heat transfer
single and multiphase flow and heat transfer
solidification and melting
double diffusive convection
turbulent heat transfer and turbulence modelling
computational solutions and solution methods
code validation and verification

LOCATION: The symposium will be held at the Novotel Palm Cove Resort, Palm Cove, Queensland, Australia. Located near a beautiful palm-fringed beach 20 km north of Cairns International Airport, the Novotel Resort is only a short boat trip to the Great Barrier Reef, one of the natural wonders of the world, and within easy reach of the lush rainforests of the
tropical Atherton Tablelands. Excursions to these and other beauty spots will be offered, and extended pre- or post-conference tours will be available. Room charges will be from $A120 per person per day twin share,
including a full buffet breakfast, a light lunch and morning and afternoon
tea or coffee. (The current exchange rate - December 1999 - is $A 1.00 ~ $US 0.64 ~ 1.24 DM)

SELECTION, PRESENTATION AND PUBLICATION OF PAPERS: Manuscripts (up to 8 pages) are to be submitted for review by August 1, 2000. After review and
correction (if necessary), the final manuscripts will be due by March 1, 2001. There will be both oral and poster presentations. All papers accepted for presentation, whether orally or by poster, will be included in the Proceedings, to be published by Begell House Inc. A CD-ROM containing the proceedings will also be produced.

FOR FURTHER INFORMATION, SEE

http://cht01.mech.unsw.edu.au

OR SEND AN EMAIL TO

cht01@cfd.mech.unsw.edu.au

Symposium co-chairs:

Graham de Vahl Davis and Eddie Leonardi
CFD Research Laboratory,
The University of NSW,
Sydney, NSW,
AUSTRALIA 2052.

From: ross@siam.org
Subject: Conference on Applied Linear Algebra (LA00)
Date: Mon, 27 Dec 1999

Greetings,

I'm writing to inform your electronic publication that the Seventh SIAM Conference on Applied Linear Algebra (LA00) call for papers is now on the web at:

http://www.siam.org/meetings/la00/

The deadline for submission of contributed abstracts for a poster presentation or lecture presentation is May 1, 2000.

Electronic submission are welcome using the new Conference Management System at:

http://www.siam.org/meetings/la00/part.htm

Please feel free to contact me if you have any questions.

Regards,

Darrell Ross, Conference Program Manager
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ross@siam.org Phone:(215) 382-9800 Fax: (215) 386-7999
http://www.siam.org/meetings/

From: "VSP, marketing department" <vsppub@compuserve.com>
Subject: Contents, Journal of Inverse and Ill-Posed Problems
Date: Mon, 6 Dec 1999

Journal of Inverse and Ill-Posed Problems 1999 Vol. 7, No. 6
Table of Contents

Volterra operator equations. L2-theory
J.S. Azamatov and S.I. Kabanikhin

Determination of the parameters of an elastic isotropic medium in a cylindrical domain T.V. Bugueva

Identification of the shape of the inclusion having essentially bounded conductivity M. Ikehata

A numerical investigation of Newton-type methods applied to a

parabolic inverse problem S. Kindermann

An approximate method for solving the inverse scattering problem with fixed-energy data A.G. Ramm and W. Scheid

Multidimensional inverse hyperbolic problem with impulse input and a single boundary measurement V.G. Romanov and M. Yamamoto

More information on this journal, such as contents of previous issues, instructions to authors, can be found on:
http://www.vsppub.com/journals/jn-JouInvIllPro.html

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From: james beck <jamesverebeck@home.com>
Subject: IPE
Date: Sat, 18 Dec 1999

Inverse Problems in Engineering 1999 Volume 7, Number 5
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A Numerical Method for an Inverse Biharmonic Problem
D. Lesnic, L. Elliott, D. B. Ingham and A. Zeb

On the Regularization of the Inverse Laplace Transform in Grazing-emission X-ray Fluorescence Spectroscopy
C. Kok and H. R Urbach

On the use of Regularisation Techniques for Finite Element Model Updating S. Ziaei-Rad and M. Imregun

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From: Secretary Support - Magrijn <magrijn.secsup@tip.nl>
Subject: Journal MCSS
Date: Thu, 16 Dec 1999

Mathematics of Control, Signals, and Systems 1999 Vol. 12, No. 4
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Robust feedback control of a single server queueing system
J.A. Ball, M.V. Day and P. Kachroo

Relative entropy and error bounds for filtering of Markov processes
J.M.C. Clark, D.L. Ocone and C. Coumarbatch

Hankel singular values and vectors of a class of infinite dimensional systems: Exact Hamiltonian formulas for control and approximation problems Y. Ohta

INFORMATION
Information on MCSS including tables of contents is available at its home pages:
www.cwi.nl/~schuppen/mcss/mcss.html

www.math.rutgers.edu/~sontag/mcss.html

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Corry Magrijn (Secretary) for Jan H. van Schuppen (Co-Editor)

From: Hans Schneider <hans@math.wisc.edu>
Subject: LAA contents
Date: Fri, 3 Dec 1999

Linear Algebra and Its Applications December 1999 Vol. 301, Nos. 1-3

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ContentsDirect, which is automatically generated, lists the first author of each paper and the corresponding author (if different).

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