

NA Digest Sunday, March 28, 2004 Volume 04 : Issue 13

Today's Editor:

Cleve Moler
The MathWorks, Inc.
moler@mathworks.com

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From: Henk van der Vorst <vorst@math.uu.nl>
Date: Tue, 23 Mar 2004 13:35:22 +0100 (CET)
Subject: Bram van der Sluis

With much regret I have to inform you that our colleague
Bram van der Sluis passed away last Saturday (March 20, 2004).

Bram van der Sluis was a full professor in Numerical Mathematics with
the Mathematical Institute at Utrecht University in the period 1962 - 1988.
Heavily influenced and inspired by late Jim Wilkinson's work, he
contributed to the area of numerical linear algebra with papers on
equilibration, condition numbers, scaling, and perturbations of
eigenvalues. This work, published in the late 1960s and the 1970s
is still cited. Later he became interested in sparse matrix problems
and together we have published papers on the superlinear convergence
behavior of the CG method, regularizing effects of CG and on the
convergence of Ritz values in the late 1980s.

I was one of his PhD students and I am thankful for the many deep discussions that I had with Bram on topics around iterative methods.

Bram van der Sluis attended many Householder Symposia (previously Gatlinburg Conferences) and was also a regular guest at Oberwolfach meetings.

After his retirement in 1988 he was still a regular guest at our department, but was no longer seen at International meetings.

About six years ago he developed health problems and although these did not seem too serious initially, they became limiting over the past year and some three months ago he learned that he would not have to live long anymore. This did not have much effect to his good spirits; at least for his colleagues at our institute it came as a shock to learn that he was in his final stage last week.

Bram is survived by his wife Helga, his four children and ten grandchildren. We remember him as an inspiring teacher, a dedicated researcher and a great colleague who did more than his share in organizational work for our institute and for the Dutch numerical community.

The Farewell meeting will be on Thursday, March 23.

Henk van der Vorst

From: Jack Dongarra <dongarra@cs.utk.edu>

Date: Mon, 22 Mar 2004 17:49:04 -0500

Subject: Linear Algebra Software Survey

I'm planning to update the survey of freely available software for the solution of linear algebra problems. The April 2003 version of the survey can be found at: <http://www.netlib.org/utk/people/JackDongarra/la-sw.html>

The aim is to put in "one place" the source code that is freely available for solving problems in numerical linear algebra, specifically dense, sparse direct and iterative systems and sparse iterative eigenvalue problems.

Please send me updates and corrections. I will post a note on the na-digest when the new list is available.

Thanks,

Jack <<mailto:dongarra@cs.utk.edu>>

From: Filippo Maria Denaro <denaro@unina.it>

Date: Wed, 24 Mar 2004 22:23:57 +0100

Subject: New Book, Metodi di Calcolo Numerico per L'ingegneria

Hi

I would like to announce the new book:

FM. Denaro,
Metodi di calcolo numerico per l'ingegneria, Liguori Editore
ISBN: 88-207-3668-3, ed.: 2004, pp.: 232
<http://www.liguori.it/schedanew.asp?isbn=3668&tipologia=>

which is devoted to the three-years academic courses in engineering.
This book considers the Lagrangian interpolation in 1 and 2 dimensions
and the cubic spline, the techniques of numerical derivation and
integration, their accuracy analysis, both in the physical and Fourier
space, and the iterative methods for linear systems.
Many examples are reported, some of them resolved by means of Maple,
others with Matlab. Some Fortran examples are also reported.
Language is Italian, English translation is planned in the future.

Best regards
Filippo M Denaro

From: Arnold Neumaier <Arnold.Neumaier@univie.ac.at>
Date: Fri, 26 Mar 2004 21:06:49 +0100
Subject: SNOBFIT for Robust Noisy Optimization

SNOBFIT (Stable Noisy Optimization by Branch and FIT)
is a MATLAB 6 package for the robust and fast solution
of noisy optimization problems with continuous variables
varying within bound, possibly subject to additional
soft constraints. Discrete variables are not supported.

Objective function values must be provided by a file-based
interface; care is taken that the optimization proceeds
reasonably even when the interface produces noisy or
even occasionally undefined results (hidden constraints).
The interface makes it possible to use SNOBFIT with new
data entered by hand, or by any automatic or semiautomatic
experimental system.

This makes SNOBFIT very suitable for applications to the
selection of continuous parameter settings for simulations
or experiments, performed with the goal of optimizing some
user-specified criterion. Since multiple data points can be
entered, SNOBFIT can take advantage of parallel function
evaluations.

The method combines a branching strategy to enhance the
chance of finding a global minimum with a sequential
quadratic programming method based on fitted quadratic
models to have good local properties. Various safeguards
address many possible pitfalls that may arise in practical
applications, for which most other optimization routines
are ill-prepared. Soft constraints are taken care of by
a new penalty-type method with strong theoretical properties.

Source code and a description of the methods used can be found at <http://www.mat.univie.ac.at/~neum/software/snobfit/> or via my Global (and Local) Optimization web site.

Arnold Neumaier

From: Kaushal Srivastava <kks_ceser@yahoo.com>
Date: Tue, 23 Mar 2004 09:34:28 -0800 (PST)
Subject: E-Bulletin of Statistics & Economics

Submit an article/news to the "E-Bulletin of Statistics & Economics" (BSE)

A contributor may submit his/her article, news or contribution through e-mail to the Executive Editor (kks_ceser@yahoo.com). Please quote "Contribution" as a subject. On the First day of every month, the Executive Editor of the e-Bulletin of Statistics & Economics (BSE) will go over the messages, which have queued up. And pick out the ones that are thought to be of general interest to the applied mathematics, statistics, economics and for interdisciplinary community, combine them in a BSE format, and mail to everyone on the subscription list.

A student/academician/scientist/researcher may submit his/her request for free subscription for BSE through e-mail to the Executive Editor (kks_ceser@yahoo.com). Please quote "BSE Subscription" as a subject.

Executive Editor
Dr. Kaushal K. Srivastava
Director,
Centre for Environment, Social & Economic Research
Post Box No. 113,
Roorkee-247667,
INDIA
e-mail: kks_ceser@yahoo.com

From: Peter Turner <pturner@clarkson.edu>
Date: Wed, 24 Mar 2004 08:41:46 -0500
Subject: Undergraduate Paper Session at SIAM AN04

Undergraduate Projects in Computational Science and Engineering
SIAM National Meeting, Portland, Oregon, July 12 - 16, 2004

As part of the Student Day activities at the SIAM Annual Meeting, www.siam.org/meetings/an04, it is again planned to have a session devoted to undergraduate research projects in Computational Science and Engineering. This builds on a successful sessions at SIAM50 in Philadelphia, and last year in Montreal. The hope is that event this will become a regular feature of SIAM's student activities.

SIAM has a fund available to help with students' costs in attending the meeting. Details are available at SIAM's web site:
www.siam.org/prizes/travel.htm.

Interested students are invited to submit the following by e-mail in plain text format:

Title,
Name(s) of student(s),
Name(s) of Advisor(s), and a
Brief abstract
to the organizers:
Peter Turner, pturner@clarkson.edu
Angela Shiflet, shifletab@wofford.edu
Kris Stewart, stewart@sciences.sdsu.edu

Deadline for submission: April 2, 2004 -- extended to April 10.
However, note that there is a maximum of 6 presentation slots available, so early submission is advised.

From: Kees Oosterlee <C.W.Oosterlee@math.tudelft.nl>
Date: Thu, 25 Mar 2004 13:52:48 +0100
Subject: European Multigrid Conference

EMG2005: 8th European Multigrid Conference

27-30 September 2005, Scheveningen, The Hague, The Netherlands

Topics: Multigrid, multilevel and multiscale methods
Venue: Scheveningen Pier, 300 meters offshore

Organizing committee:

P.Wesseling, TU Delft
C.W. Oosterlee, TU Delft
P. Hemker, CWI Amsterdam
W. Hackbusch, MPI Leipzig
G. Wittum, U. Heidelberg

Further details will be made available via the conference website
pcse.tudelft.nl/emg2005
Enquiries can be addressed by email to emg2005@math.tudelft.nl

C.W.Oosterlee,
Delft University of Technology,

From: Bill Henshaw <henshaw@llnl.gov>
Date: Sat, 27 Mar 2004 10:31:16 -0800
Subject: Conference in California on Overset Composite Grids

Announcement and Call for Papers for
The 7th Symposium on Overset Composite Grids & Solution Technology

You are invited to attend the next bi-annual symposium to be held
October 5-7, 2004, at the Boeing Conference Center, Huntington Beach,
California USA.

This international symposium provides an open communication forum for
mathematicians, scientists, and engineers from academia, industry, and
government. The symposium organization is quite informal, and the
primary purpose is to present and discuss new, current, and work in
progress of the participants. The specific goals of the symposium are
the following:

- * Communicate current work, new research ideas, and work in progress
- * Exchange ideas involving overset grid methodologies
- * Develop interactions between interested researchers
- * Provide an opportunity for interaction between researchers,
developers, and users.

Electronic information and registration is available at the Symposium
web site: <http://www.arl.hpc.mil/events/Overset2004>

We ask that you register your intent to participate via the web site
to help us plan for the symposium.

You can download a pdf file of the symposium announcement brochure
from the web site.

Please forward this announcement to anyone who may be interested.

IMPORTANT DATES:

Intent to Attend/Present: May 1, 2004

Title of Presentation: August 2, 2004

Pre-registration Deadline: August 2, 2004

Electronic copy of Abstract and Manuscript or Presentation: September 2, 2004

Symposium Registration Fees:

Regular: \$200 Full Time Students: \$125

Registration fee includes participation in the symposium, continental
breakfast and lunch each day, welcome reception Monday evening,
social Wednesday evening, and copies of the symposium presentations.

CONTACT PERSON:

Ralph Noack

CFD Onsite Lead, ARL MSRC

University of Alabama at Birmingham

PMB #134, 939-I Beards Hill Road Aberdeen, MD 21001

E-mail: rnoack@uab.edu

Voice: (410) 278-7157

Fax: (410) 297-9521

From: Sever Dragomir <sever@matilda.vu.edu.au>
Date: Tue, 23 Mar 2004 16:52:05 +1100
Subject: Conference in Melbourne on Mathematical Inequalities

International Conference on Mathematical
Inequalities and their Applications, I
December 06-08, 2004
Victoria University, Melbourne, Australia
<http://rgmia.vu.edu.au/conference/index.html>

(First Announcement)

The International Conference on Mathematical Inequalities and their Applications, (I), will be held at Victoria University (Footscray Park Campus) in Melbourne from Monday 06th to Wednesday 08th December 2004, and you are cordially invited to participate.

The aim of this conference is to stimulate researchers from all fields of science to collaborate and present new results in mathematical inequalities and their applications.

The Journal of Inequalities in Pure & Applied Mathematics, will publish the Proceedings of the Conference, after a normal refereeing procedure. The papers will be organised in a Special Issue.

The International Scientific Committee consists of leading experts in Mathematical Inequalities and their Applications.

For an expression of interest to attend the conference, please contact Professor S.S. Dragomir at sever@matilda.vu.edu.au as soon as possible but no later than 15th April, 2004. The list of intended participants will be periodically kept updated about the deadlines, abstracts, programme etc...

Yours sincerely,

Sever S. Dragomir
On behalf of the Local Organising Committee

From: Bruce Wade <wade@uwm.edu>
Date: Tue, 23 Mar 2004 16:17:27 -0600
Subject: Conference in Uppsala on CMMSE

Dear Colleagues:

You are cordially invited to participate in

The International Conference on Computational and Mathematical
Methods in Science and Engineering (CMMSE 2004)

Uppsala, Sweden, June 4-8, 2004.

For more details see our web page <http://www.fysik.uu.se/cmmse/>

From: Siv Sivaloganathan <ssivalog@sumathi.uwaterloo.ca>
Date: Tue, 23 Mar 2004 17:25:24 -0500 (EST)
Subject: Workshop at Fields Institute on Mathematical Oncology

Registration is still open for a focussed workshop on mathematical oncology to be held 23-24 April 2004 at the Fields Institute for Research in the Mathematical Sciences, Toronto.

The invited speakers are roughly equally split between medical/clinical researchers and applied mathematical researchers and will speak on a variety of topics in oncology of current interest. The intention is that the talks be accessible to both communities and hopefully stimulate further collaborative, interdisciplinary research.

Very limited funding is still available for graduate students and postdocs. Further information can be found at:

www.fields.utoronto.ca/programs/scientific/03-04/mathoncology/

From: Deborah Michael <debmich@stanford.edu>
Date: Wed, 24 Mar 2004 16:18:34 -0800
Subject: Faculty Position at Stanford

STANFORD UNIVERSITY

Institute for Computational and Mathematical Engineering and the Department of Management Science and Engineering

The Institute for Computational and Mathematical Engineering (ICME) and the Department of Management Science and Engineering (MS&E) at Stanford University invite applications for a joint faculty position, beginning in September 2004. The ideal candidate is someone with a strong methodological background in optimization (continuous and/or discrete) and/or computational probability, with interests in analysis and management of complex systems such as financial institutions, energy grids, communication networks, security operations, air-traffic controls, supply chains, markets, and health care services. Evidence of the ability to pursue independent research and a commitment to both graduate and undergraduate teaching are required. This will be a tenure line position at the junior (Assistant or untenured Associate Professor) level.

Applicants should submit their curriculum vitae, any completed research papers, an official graduate transcript, a brief statement of research and teaching interests, and ensure that three letters of recommendation are sent to:

ICME/MS&E Search Committee Chair
Building 500, Room 500B
Stanford University
Stanford, CA 94305-3035

Applications should be received by April 15, 2004. Stanford University is an equal opportunity, affirmative action employer.

From: Peter Weigand <peter.weigand@mathematik.tu-chemnitz.de>
Date: Thu, 25 Mar 2004 10:40:57 +0100
Subject: Faculty Position at TU Chemnitz

Applications are invited for the tenured position of

Full Professor (C4) in Numerical Analysis (Partial Differential Equations)

Candidates with a proven outstanding record in Numerical Analysis, particularly in Numerical Methods for Partial Differential Equations and its application to technological problems are encouraged to apply. He or she is expected to collaborate closely with colleagues involved in the DFG Special Research Center and with engineers. Appropriate participation in organizational duties and responsibilities and in the training of young researchers are essential.

The successful candidate is expected to have experience in securing external funding and in managing externally funded projects, as well as international experience in teaching and research.

In line with article of the Higher Education act (Saechsisches Hochschulgesetz), a postdoctoral lecturing qualification (Habilitation) or comparable qualifications for a teaching career in higher education are required.

The successful candidate will be offered civil servant or public sector employee status (Professor Grade "C4" according to the German system).

Applications must reach the Technische Universitaet Chemnitz, Dean Prof. Bernd Heinrich, Fakultat fur Mathematik, D-09107 Chemnitz
<http://www.tu-chemnitz.de/sfb393/>

From: Jeff Orchard <jorchard@cs.uwaterloo.ca>
Date: Fri, 26 Mar 2004 13:14:07 -0500
Subject: Faculty Position at University of Waterloo

Scientific Computation Position

School of Computer Science
University of Waterloo

The School of Computer Science at the University of Waterloo invites applications for a tenure stream position in scientific computation. The successful applicant will be expected to participate in the Computational Mathematics program, which is an interdisciplinary program in the Faculty of Mathematics (<http://www.math.uwaterloo.ca/navigation/Current/CompMath/>) and to work with the scientific computation research group (<http://www.scicom.uwaterloo.ca>).

Preference is to appoint at the junior level, but exceptionally well-qualified applicants will also be considered for appointment at more senior levels. The research program of the scientific computation group is currently focused on software for PDE-based modeling, medical image processing, and numerical linear algebra. Members of the group have carried out extensive research collaborations in the areas of computational finance, physically based animation, groundwater pollution remediation, and magnetic resonance imaging.

The School of Computer Science is a large, diverse academic unit in the Faculty of Mathematics (http://www.math.uwaterloo.ca/CS_Dept). Its undergraduate and graduate programs are highly regarded, and its researchers receive funding from federal and provincial agencies, as well from private industry.

A Ph.D. in Computer Science or equivalent is required, with evidence of excellence in teaching and research. The successful applicant is expected to have a strong background in computational techniques and have a significant interest in an applications area. He or she is expected to develop and maintain a productive program of research, to attract and develop highly qualified graduate students, to provide a stimulating learning environment for undergraduate and graduate students, and to contribute to the administration of the School.

Applications should include a curriculum vitae and the names and e-mail addresses of three references. The application should be directed to: J W W Wong, Director, School of Computer Science, University of Waterloo, Waterloo, Ontario, Canada N2L 3G1, cs-chair@cs.uwaterloo.ca. To expedite the handling of applications, candidates should ask those named as references to direct supporting letters to the same address. The start date of the position is negotiable. Applications will be considered as soon as they are complete and as long as the position remains available.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

From: Arnold Neumaier <Arnold.Neumaier@univie.ac.at>
Date: Fri, 26 Mar 2004 21:16:13 +0100
Subject: Faculty Position at the University of Vienna

The Department of Mathematics at the University of Vienna has an open position for a Professor for Differential Equations. Details (in German) can be found at <http://www.mat.univie.ac.at/ausschreibung.php>

Arnold Neumaier

From: Ming Gu <mgu@math.ucla.edu>
Date: Tue, 23 Mar 2004 19:21:53 -0800 (PST)
Subject: Technical Staff Position at Therma-wave

Therma-wave is a company in the development of process control metrology equipment for semiconductor manufacturing. Therma-wave invites applications for the following position:

Job title: member of technical staff.

Job Description:
Develop efficient algorithm for scattering of electromagnetic fields. Assist in the enhancement and improvement of thin film algorithms.

Qualifications:
Ph. D in computational physics or numerical analysis or equivalent, with more than 5 years experience of demonstrated proficiency in solving complex physics problems and numerical programming in C++, Fortran 90/95.

Location:
Fremont, California

If interested, please send your application and resume immediately to:

Dr. Hanyou Chu
Email: hchu@thermawave.com
Phone: (510) 668-2460
FAX: (510) 656-3863

From: Science Direct <sciencedirect@prod.lexis-nexis.com>

Date: Tue, 23 Mar 2004 04:58:14 -0500 (EST)

Subject: Contents, Journal of Approximation Theory

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