NA Digest Monday, November 18, 1991 Volume 91 : Issue 46

Today's Editor: Cleve Moler

Today's Topics:

Submissions for NA Digest:

Mail to na.digest@na-net.ornl.gov.

Information about NA-NET:

Mail to na.help@na-net.ornl.gov.

From: Pierre Comon <Pierre.Comon@sophia.inria.fr>
Date: Wed, 13 Nov 91 17:31:13 +0100
Subject: Solving Polynomial Systems

Are there standard routines for solving systems of polynomial equations
with several unknowns ? Unknowns can be real, complex, or even rational.

Pierre Comon comon@zenon.inria.fr, or, na.comon@na-net.ornl.gov

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From: Kris Stewart <stewart%saturn@sdsu.edu>
Date: Sat, 16 Nov 91 10:03:26 -0800
Subject: SDSU Undergrad Curriculum in Supercomputing

An interdisciplinary, undergraduate course has been
developed at San Diego State University (SDSU) to teach
the fundamentals of architecture and software tools that
promote effective use of the Cray Y-MP 8/864 Supercomputer
at the San Diego Supercomputer Center (SDSC). This work
was supported by the NSF Division of Advanced Scientific
Computing. The only prerequisite for the course is a good

programming background in Fortran or C.

A residential, faculty workshop will be presented July 13-17, 1992 at SDSC (on the campus of UCSD La Jolla) to provide access to the Cray and promote discussions on undergraduate curricula in Advanced Scientific Computing. Faculty from primarily undergraduate institutions are encouraged to contact:

Dr. Kris Stewart
Dept. Math Sciences
SDSU
San Diego, CA 92182-0314
(stewart@cs.sdsu.edu)

If you will be at Supercomputing '91 in Albuquerque next week, drop bythe SDSC booth for more information or to talk to Kris on Thursday.

Lecture notes from the course taught Spring 1991 at SDSU are available via anonymous ftp from sdsc.edu in the directory undergradcurriculum_lecture_notes under sdscpub

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From: Pieter de Groen <pieter%tena2.vub.ac.be@VTVM2.CC.VT.EDU>
Date: Tue, 12 Nov 91 10:35:41 +0100
Subject: IMACS Proceedings on Iterative Methods in Linear Algebra

The proceedings of the IMACS International Symposium on Iterative Methods in Linear Algebra held in Brussels, April 2-4, 1991 are now in print at Elsevier Science Publ. This volume contains the (refereed) contributions to the Symposium.

The symposium gathered more than 100 participants from over 25 countries. There were 7 invited lectures (by O. Axelsson, F. Chatelin, D. Kincaid, A. van der Sluis, H.A. van der Vorst, E.L. Wachspress and A.Yu. Yeremin) and nearly 70 accepted contributed papers providing an almost exhaustive covering of the subject, comprising among others, parallel and vector iterative algorithms, methods for solving nonsymmetric problems, preconditioned conjugate gradient methods for symmetric problems, spectral methods, numerical methods fo the analysis of Markov models, complex variable methods.

The volume will be published in February 1992 under the title "Iterative Methods in Linear Algebra",
edited by R. Beauwens and P.P.N. de Groen
at a list price of Dfl. 250.- . The participants of the symposium will receive a free copy directly from the publisher. Those that are interested and who order this volume before February 1st, 1992, are entitled to a 25% discount off the list price (Dfl. 187.50) including postage/handling. Orders are to be send to

Marijcke Haccou, Elsevier Science Publishers,
P.O, Box 103, NL - 1000 AC Amsterdam, The Netherlands,
Fax +31 20 5862621
Orders must be prepaid. Access/ Eurocard/ Mastercard/ American Express/ VISA, and Bank Draft/ Eurocheque/ Postal Cheque/ International Money Order are accepted.

Robert Beauwens, beauwens@bbrnsf11.bitnet
Pieter de Groen, pieter@tena2.vub.ac.be

From: Robert G. Voigt <rgv@icase.edu>
Date: Tue, 12 Nov 91 12:50:17 -0500
Subject: Scalable High Performance Computing Conference

SHPCC '92 Call for Papers
Scalable High Performance Computing Conference
April 26-29, 1992, Williamsburg Hilton, Williamsburg, VA.

Sponsored by IEEE

The Scalable High Performance Computing Conference (SHPCC) is the successor to the Distributed Memory Computing Conference series. We define a scalable high performance architecture as an architecture that is likely to be capable of delivering a teraflop sustained performance in the relatively near future. SHPCC will focus on software being developed to make it possible to effectively exploit the coming generations of these architectures and on applications that require teraflop computational rates.

We invite papers from researchers who are developing or evaluating software tools such as compilers, programming environments, and debuggers along with tools to monitor and tune performance. Papers are also solicited from those who have developed and analyzed multiprocessor applications codes. We plan to place particular emphasis on two general application areas. The first is that of computational fluid dynamics and its uses in problems that arise in the design of aircraft, spacecraft and automobiles. The second application area consists of molecular dynamics and its uses in the pharmaceutical and chemical industries.

The conference will begin with one day of tutorials. The two and one half day technical program that follows will consist of four invited talks, two parallel tracts of half hour talks, and a small poster session.
We invite researchers to submit a four page extended abstract in hard copy, LaTeX, or Troff to the address below by November 25, 1991.
The abstracts will be carefully reviewed by the program committee and the authors will be notified by early January, 1992. The proceedings will be published by IEEE and will be available at the time of the conference. Final papers will be due approximately, March 1, 1992.

Ms. Emily Todd,
ICASE,

Mail Stop 132-C,
NASA Langley Res. Ctr.,
Hampton, VA 23665
email: emily@icase.edu

General Chair: Robert Voigt, ICASE

Program Committee:

Joel Saltz, ICASE, Chair
Joseph Brandenburg, Intel Corp.
Geoffrey Fox, Syracuse Univ.
Dennis Gannon, Indiana Univ.
Andrew Grimshaw, Univ. of Virginia
Micheal Heath, Univ. of Illinois
Lennart Johnnson, Harvard Univ. & Thinking Machines Corp.
Robert Martino, National Institutes of Health
Paul Messina, California Institute of Technology
Dan Reed, Univ. of Illinois
Manuel Salas, NASA Langley Research Center
Horst Simon, Computer Sciences Corp.

From: Bobby Schnabel <bobby@anchor.cs.colorado.edu>
Date: Mon, 11 Nov 1991 14:49:26 -0700
Subject: International Symposium on Symbolic and Algebraic Computation

The ISSAC Conference is being co-sponsored this year by SIGNUM
(the ACM Special Interest Group on Numerical Mathematics)
A special effort is being made to include topics of interest to
the numerical computation community.

Bobby Schnabel
University of Colorado at Boulder
(chair, ACM SIGNUM)

CALL FOR PAPERS
INTERNATIONAL SYMPOSIUM ON
SYMBOLIC AND ALGEBRAIC COMPUTATION

July 27-29, 1992
Berkeley, California

The annual International Symposium on Symbolic and Algebraic Computation (ISSAC), sponsored by the ACM Special Interest Groups on Numerical Mathematics and on Symbolic & Algebraic Manipulation, will be held on the campus of the University of California at Berkeley, July 27-29, 1992. Papers presenting original research on all aspects of symbolic and algebraic computation are sought. Typical, but not exclusive topics of interest include: combined symbolic/numeric methods (special emphasis is placed on this subject); algo-

rithms for problems in algebra, number theory, group theory, algebraic geometry, differential algebra, and differential equations; languages and systems for symbolic computation, parallel symbolic computation; automatic theorem proving and programming; applications of symbolic computation to mathematics, science, engineering, and education.

PAPER SUBMISSION: Authors are requested to send 15 copies of their paper by January 14, 1992 to either of the program committee chair:

Daniel Lazard
LITP, Inst. Programmation, Universite Paris VI
Research Ctr., P. O. Box 218
F-75230 Paris Cedex 05, France

Barry Trager
IBM T.J. Watson Research Ctr., P. O. Box 218
Yorktown Heights, NY 10598, USA

Authors from locations where access to reproduction facilities is severely limited may submit a single copy of their paper. The submission should start with a succinct statement of the problem, the results achieved, an explanation of their significance, and a comparison with previous work. This material should be readily understandable to non-specialists. Technical development, directed toward the specialist, should follow as appropriate. The length, excluding cover page and bibliography, should not exceed 10 pages. If authors believe that more details are necessary to substantiate the main claims of the paper, they may include a clearly marked appendix that will be read at the discretion of the program committee. The title should include the contact author's name, address, telephone number, and e-mail address if available.

A paper must be received by January 14, 1992 (or postmarked by January 2 and sent airmail), or it risks rejection without consideration of merit. Simultaneous submission of essentially the same paper to another conference with published proceedings is not allowed.

NOTIFICATION: Authors will be notified of acceptance or rejection by the program committee chairs by a letter mailed by the end of March. A final copy of each accepted paper is to be in the hands of the proceedings editor Paul Wang, Dept. Math. & Comput. Sci., Kent State Univ., Kent, OH 44342, by April 29.

MEETING FORMAT: Authors of accepted papers will be expected to present their work at the Symposium. There will be a small number of researchers invited to speak on topics of general interest to the conference.

PROGRAM COMMITTEE: Bruce Char, Henri Cohen, James Davenport, Jean Della Dora, John Gilbert, Lakshman Y. N., Daniel Lazard, Gerhard Michler, Michael Monagan, Jean-Jacques Risler, Horst Simon, Stanly Steinberg, Barry Trager, Carlo Traverso, and Richard Zippel.

CONFERENCE OFFICERS: The organizing officers are Richard Fateman (local arrangements chair), Robert Grossman (treasurer), Erich Kaltofen (conference chair), Daniel Lazard (prog. committee co-chair), Moss Sweedler (publicity chair), Barry Trager (prog. committee co- chair), and Paul Wang (proceedings editor).

LOCAL ARRANGEMENTS COMMITTEE: The local arrangements committee consists of John Canny, James Demmel, Richard Fateman, and Kathy Yelick.

For further information contact:

Richard Fateman
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571 Evans Hall
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E-mail: fateman@cs.berkeley.edu
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Moss Sweedler
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Cornell University
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Phone: (607) 255 4373

From: John Miller <JMILLER@vax1.tcd.ie>
Date: Thu, 14 Nov 1991 14:15 GMT
Subject: NASECODE VIII International Conference

FIRST ANNOUNCEMENT, CALL FOR PAPERS AND CALL FOR SESSION ORGANIZERS

BAIL VI

The Sixth International Conference on Boundary and Interior Layers -

Computational and Asymptotic Methods

Summit County, Colorado, USA
August 17-21, 1992

under the auspices of
INCA - the Institute for Numerical Computation and Analysis, Dublin, Ireland
Front Range Scientific Computations Inc.

SESSION TOPICS
These include stiff systems of ordinary differential equations,
numerical and asymptotic methods for boundary and interior layers,
singular perturbations, shocks, multiphase problems, solitary waves,
bifurcation, chaos, singular perturbations in biology chemistry,
control theory, engineering, mathematics and physics.

HOW TO CONTRIBUTE A PAPER
Potential contributors should submit an abstract (one page, 500 words maximum)
which must clearly state the purpose of the work.

TUTORIAL SHORT COURSES
Several one-day tutorial, non-specialist short courses will be held
in parallel on the first day. Lecture Notes will be provided.

PUBLICATIONS
The proceedings will be available at the Conference.

LOCATION AND ACCOMMODATION
Summit County, Colorado is located in the heart of the Rocky Mountains.

DEADLINES
Contributed papers and proposals for sessions may be submitted at any time.
However, to ensure that papers are published in the Proceedings, they must
be received in camera ready form by the BAIL Secretariat no later than April 15.

BAIL SECRETARIAT

Postal address: 26 Temple Lane, Dublin 2, Ireland

Telecommunications:
Scientific matters:
Professor John Miller
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Telex 30547 SHCN EI (Ref: BAIL)

All other matters:
Paulene McKeever
Telefax (+353-1) 451739
Telephone (+353-1) 452081
Telex 30547 SHCN EI (Ref: BAIL)

From: Jim Verner <jim@jhv.mast.QueensU.CA>
Date: Mon, 11 Nov 91 13:21:22 EST
Subject: Position at Queen's University, Kingston

POSITION AT QUEENS UNIVERSITY AT KINGSTON,
DEPARTMENT OF MATHEMATICS AND STATISTICS

The department will be making an appointment in a renewable (tenure track) position at the assistant professor level, to begin July 1992. Applications are invited in the areas of Statistics, Numerical Analysis and Applied Mathematics. In the case of an application in the area of Applied Mathematics, membership or eligibility for membership in a Canadian professional engineering association is required. The successful applicant will have excellent research promise and a demonstrated potential to give leadership in promoting scholarly activities within the department.

Salary will be commensurate with qualifications and experience.

Interested candidates are requested to arrange that a curriculum vitae and letters of recommendation from three or more referees be received at the address below by February 1, 1992. At least one letter should comment on the candidate's teaching ability.

Professor Leo B. Jonker, Head
Department of Mathematics and Statistics
Queen's University
Kingston, Ontario K7L 3N6, Canada.

In accordance with Canadian Immigration requirements, this advertisement is directed to Canadian citizens and permanent residents. Queen's University has an employment equity programme and encourages applications from all qualified candidates, including women, aboriginal peoples, people with disabilities and visible minorities. Queen's University is willing to help the spouse of a new appointee seek suitable employment.

Fax: 613-545-2964 BITNET: MASTDEPT@QUCDN

J. H. Verner,
Mathematics and Statistics,
Queen's University at Kingston.

From: Richard C. Allen <rcallen@cs.sandia.gov>
Date: Mon, 11 Nov 91 17:16:30 GMT-0900
Subject: Fellowship at Sandia National Laboratories

APPLIED MATHEMATICAL SCIENCES RESEARCH FELLOWSHIP

Mathematics and Computational Science Department
Sandia National Laboratories

The Mathematics and Computational Sciences Department at Sandia National Laboratories invites outstanding candidates to apply for the 1992 AMS Research Fellowship. The Fellowship is supported by the Applied Mathematical Sciences Research Program of the U.S. Department of Energy.

AMS Fellowships at Sandia provide an exceptional opportunity for innovative research in scientific computing on advanced architectures, and are intended to promote the transfer of technology from the laboratory research environment to industry and academia through the advanced training of new computational scientists. Candidates must be U.S. citizens, must have earned a recent Ph.D. degree or the equivalent, and must have a strong interest in advanced computing research.

The Mathematics and Computational Science Department is affiliated with DOE's Massively Parallel Computing Research Laboratory at Sandia which provides a unique parallel computing environment, including a 1,024-processor nCUBE 2, a 64-processor Intel IPSC-860, and a Connection Machine-2. In addition, Sandia maintains several large Cray supercomputers. The Department has strong programs in analytical, discrete, and computational mathematics, computational physics and engineering, theoretical computer science, advanced computational approaches for parallel computers, graphics, and architectures and languages. Areas of particular interest for the fellowship include massively parallel methods in direct and iterative sparse matrix computations, numerical optimization, and symbolic computation and massively parallel methods for the grand challenges; however, all applicants will be considered.

The fellowship appointment is for a period of one year, and may be renewed for a second year. It includes a highly competitive salary, moving expenses, and a generous professional travel allowance. Applicants should send a resume, a statement of research goals, and three letters of recommendation to Robert H. Banks, Division 3531-AMS, Sandia National Laboratories, P.O. Box 5800, Albuquerque, NM 87185. The closing date for applications is December 13, 1991, and prospective candidates will be invited to visit Sandia in early 1992. The position will commence during 1992.

For further information contact Richard C. Allen, Jr. at (505) 845-7825 or by e-mail, rcallen@cs.sandia.gov.

Equal Opportunity Employer M/F/V/H
U.S. Citizenship is Required

From: Dennis Gannon <gannon@iuvax.cs.indiana.edu>
Date: Tue, 12 Nov 91 22:13:54 -0500
Subject: Position in Parallel Computation, Indiana University

ASSISTANT PROFESSOR POSITION IN PARALLEL COMPUTATION AND
COMPUTATIONAL SCIENCE AT INDIANA UNIVERSITY, BLOOMINGTON, IN.

The Department of Computer Science at Indiana University is searching
for an assistant professor in the area of scientific computation. The
specific areas of interest include numerical methods and algorithms
for large scale parallel systems, performance analysis of scalable
parallel systems or parallelizing compiler technology for scientific
and engineering applications.

The Department of Computer Science has 21 research faculty members,
approximately 200 undergraduate majors, 170 masters students and 60
PhD students. A full-time systems staff of 8 individuals support a
large network of SUN, SGI, NeXT, Stardent, Dec and HP workstations. A
64-processor parallel system will be joined by a new system this
spring to support research in parallel computation. All of this is
supported in a recently renovated building designed specifically for
our research and teaching and located in the heart of a beautiful
wooded campus.

The department is strong in programming languages research, and we
have very active programs in graphics and visualization, hardware
design and cognitive sciences. The university is actively designing
a new interdisciplinary program in scientific computation.
Indiana University is an equal opportunity employer, and we very
interested in women and minority candidates.

Applicants must have a PhD in computer science or expect to have the
degree awarded before August of 1992. Interested applicants should
send resumes and names of five references to:

Pamela Milam
Department of Computer Science
Indiana University
Bloomington, Indiana 47405

From: Ian Gladwell <H5NR1001%SMUVM1@vm.cis.smu.edu>
Date: Thu, 14 Nov 91 16:07:56 CST
Subject: Department Chair Position at SMU

SOUTHERN METHODIST UNIVERSITY

DEPARTMENT CHAIR

COMPUTER SCIENCE AND ENGINEERING

Nominations and applications are invited for the position of Professor and Department Chair of the Department of Computer Science and Engineering at Southern Methodist University. Applicants must have a Ph.D. in Computer Engineering, Computer Science, or a related discipline. Candidates must have demonstrated excellence in research with a substantial grant record and a strong commitment to teaching. It is anticipated that the position will be filled by August, 1992.

SMU is a private university in Dallas, Texas with approximately 8,000 students. CSE is in the School of Engineering and Applied Science, where a close working relationship exists with the Department of Electrical Engineering. The department is growing and presently has fourteen faculty positions. CSE presents a balanced program of research and education at all levels and has been offering Ph.D. degrees since 1970. The department has extensive contacts with computer and telecommunications related industrial organizations. The Dallas area is traditionally distinguished as one of the top five centers for high technology complemented by the presence nearby of the Superconducting Super Collider.

Applicants should send a complete resume, including the names of three references to:

Professor Ian Gladwell
Chair, CSE Search Committee
208 Clements Hall
Southern Methodist University
Dallas, TX 75275
Phone: (214) 692-2542
Fax: (214) 692-4138
Email: gladwell@csvax.seas.smu.edu

SMU is an equal opportunity/affirmative action, Title IX employer. Applications from women and minorities are particularly encouraged. Applications will be accepted until February 1, 1992.

From: Merrell Patrick <Merrell_Patrick.CISE4@mailgate.cise.nsf.gov>
Date: 15 Nov 91 13:07:48
Subject: Postdoctoral Fellowships from NSF

NATIONAL SCIENCE FOUNDATION
Division of Advanced Scientific Computing
Washington, DC 20550

This is to bring to your attention opportunities for support of Postdoctoral Research Associateships in Computational Science and Engineering (CS&E) and experimental research supported by the New Technologies Program in the Division of Advanced Scientific Computing (DASC) and the Office of Cross Disciplinary Activities (CDA) in NSF's Computer and Information Science and Engineering (CISE) Directorate, in cooperation with other NSF Computational Science and

Engineering (CS&E) disciplines. The objective of the associateship awards is to increase expertise in the development of innovative methods and software for applying high performance computers in solving large scale CS&E problems and in experimental research supported by CISE as part of NSF's High Performance Computing and Communications (HPCC) activities.

These awards provide opportunities for recent Ph. D.s to broaden their knowledge and experience and to prepare them for significant research careers on the frontiers of contemporary computational science and engineering and experimental computer science. It is assumed that Research Associates will conduct their research at academic research institutions or other centers or institutions which provide access to high performance and emerging parallel computing systems and concentrate on associated research programs.

Associateship awards will be based on proposals submitted by a sponsoring institution. The principal investigator will serve as an unreimbursed scientific advisor for the research associate. Research associates may be listed as co-principal investigators. Each proposal must include a research and training plan for the proposed research associate in an activity of computational science and engineering in any of the fields supported by DASC, other NSF CS&E programs or experimental research in one of the CISE research divisions. To be eligible for this support, individuals must; (1) be eligible to be appointed as a research associate or research assistant professor in the host institution which has submitted the proposal, (2) fulfill the requirements for the doctoral degree in computational science and engineering, computer science or a closely related discipline by September 30, 1992.

Award Amounts, Stipends and Research Expense Allowances
Awards will range from $36,000-$44,000 for a 24 month period. The award will include $32,000-$40,000 to support the Research Associate (to be matched equally by the sponsoring institution). There will also be an allowance of $4,000 to the sponsoring institution, in lieu of indirect costs, as partial reimbursement for expenses incurred in support of the research. The annual award to the research associate will be composed of two parts; an annual stipend (salary and benefits) that may range from $28,000-$36,000, and a $4,000 per year research expense allowance expendable at the Associate's discretion for travel, publication expenses, and other research-related costs. There is no allowance for dependents. The effective date of the award cannot be later than January 1993.

Matching Funds
Matching funds for 24 months must range from $32,000-$40,000. As the CS&E and experimental research awards are intended to cover all NSF disciplinary areas, matching funds may come from grants from other NSF programs, other agencies programs or from other institutional resources. Matching fund arrangements are the responsibility of the submitting institution and must be detailed in the budget request.

Evaluation and Selection of Associates
Proposals will be reviewed by panel in accordance with established Foundation procedures and the general criteria described in the brochure, Grants for Research and Education in Science and Engineering (GRESE) NSF 90-77. Single copies of the GRESE brochure are available at no cost from the NSF Forms and Publication Unit, phone (202) 357-7668, or via e-mail (Bitnet:pubs@nsf or

Internet:pubs@note.nsf.gov).

Application Procedures and Proposal Materials
To be eligible for consideration, a proposal must contain forms which can be found in the GRESE brochure.
All application materials must be received by January 16, 1992. Send completed proposals with supporting application materials to: New Technologies Research Associateships, NSF 91-127, Division of Advanced Scientific Computing, Room 417, National Science Foundation, Washington, D.C, 20550. Award announcements are planned for April, 1992. In FY1991 DASC made 17 such post-doc awards. In FY1992, it is anticipated that DASC will make approximately 20 awards and CDA approximately 10 awards.

Additional Information
If you wish additional information, please contact Dr. Merrell Patrick, Program Director, New Technologies, DASC, at (202) 357-7727 (E-Mail: mpatrick@nsf.gov) or Dr. John C. Cherniavsky, Acting Head, CDA at (202) 357-7349 (E-mail: jchernia@nsf.gov)

From: SIAM Publications Department <SIAMPUBS@WILMA.WHARTON.UPENN.EDU>
Date: Fri, 8 Nov 91 11:54 EDT
Subject: Contents, SIAM Numerical Analysis

Tentative Contents
SIAM J. Numer. Anal.
February 1992, Vol. 29, No. 1

Second-Order Boltzmann Schemes for Compressible Euler Equations in One and Two Space Dimensions
B. Perthame

A Numerical Method to Calculate the Two-Dimensional Flow Around an Underwater Obstacle
N. Anders Petersson

Direct Discretization of Planar Div-Curl Problems
R. A. Nicolaides

On Error Estimates of Projection Methods for Navier-Stokes Equations: First-Order Schemes
Jie Shen

Asymptotically Exact Error Estimators for Rectangular Finite Elements
Ricardo Duran, Maria Amelia Muschietti, and Rodolfo Rodriguez

On the Mass Matrix Spectrum Bounds of Wathen and the Local Moving Finite Elements of Baines
Keith Miller

A New Method of Stabilization for Singular Perturbation Problems with Spectral Methods

Henner Eisen and Wilhelm Heinrichs

Discrete Methods for Fully Nonlinear Elliptic Equations
Hung-Ju Kuo and Neil S. Trudinger

Coefficients of the Singularities for Elliptic Boundary Value Problems on Domains with Conical Points III: Finite Element Methods on Polygonal Domains
Maryse Bourlard, Monique Dauge, Mbaro-Saman Lubuma, and Serge Nicaise

Fast Direct Solvers for Piecewise Hermite Bicubic Orthogonal Spline Collocation Equations
Bernard Bialecki, Graeme Fairweather, and Karin R. Bennett

An Unconditionally Stable Three-Level Explicit Difference Scheme for the Schrodinger Equation with a Variable Coefficient
Weizhong Dai

Image Selective Smoothing and Edge Detection by Nonlinear Diffusion
Francine Catte, Pierre-Louis Lions, Jean-Michel Morel, and Tomeu Coll

Numerical Solution of an Interdiffusion Problem
Christophe Fresnel and Marie-Noelle Le Roux

Analysis of Some Krylov Subspace Approximations to the Matrix Exponential Operator
Y. Saad

Solving Eigenvalue Problems of Real Nonsymmetric Matrices with Real Homotopies
T. Y. Li, Zhonggang Zeng, and Luan Cong

A Note on Deferred Correction for Equality Constrained Least Squares Problems
Jesse L. Barlow and Udaya B. Vemulpati

Long and Thin Triangles Can Be Good For Linear Interpolation
Shmuel Rippa

A New Method for Approximating Improper Integrals
H. L. Gray and Suojin Wang

Trapezoidal Stratified Monte Carlo Integration
Stamatis Cambanis and Elias Masry

For additional information on SIAM Review, please contact Vickie Kearn, Publisher, Society for Industrial and Applied Mathematics (SIAM), 3600 University City Science Center, Philadelphia, PA 19104-2688; (215) 382-9800; fax: (215) 386-7999; e-mail: siampubs@wharton.upenn.edu.

End of NA Digest

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