NA Digest Thursday, June 2, 1988 Volume 88 : Issue 22

Today's Editor: Mark Kent

Today's Topics:

From: Jack Dongarra <dongarra%antares@anl-mcs.arpa>
Date: Mon, 23 May 88 13:07:04 CDT
Subject: Level 3 BLAS update notice

In April 1987 we published a proposal for a set of Level 3 BLAS.
Since then the proposal has been presented and discussed at various
meetings, comments have been received, and experience gained in using
the Level 3 BLAS to code block-structured algorithms in Linear Algebra.
As a result we have decided to make the a number of changes to the
original proposal.

To receive a hardcopy of the changes and of the revised report send a note to:

dongarra@anl-mcs.arpa
or
Jack Dongarra
Mathematics and Computer Science Division
Argonne National Laboratory
Argonne, Illinois 60439

You can obtain a postscript copy of the update and report
by sending a message to netlib@anl-mcs.arpa, in the message type:

send update-notice from blas3
send paper-post from blas3

Jack

From: Alastair Spence <ma_as%ux63.bath.ac.uk@NSS.Cs.Ucl.AC.UK>
Date: Wed, 25 May 88 15:04:56 BST
Subject: JOB AT BATH, UK

UNIVERSITY OF BATH, U.K.
SCHOOL OF MATHEMATICAL SCIENCES

LECTURESHIP IN COMPUTATIONAL APPLIED MATHEMATICS / NUMERICAL ANALYSIS

Applications are invited for the above post which is available from 1st. September 1988 in the School of Mathematical Sciences. The present appointment is being made in the Mathematics Group, which includes pure and applied mathematics, control theory and numerical analysis.

It is expected that the successful candidate will be working in numerical analysis or in some area of computational applied mathematics, which should be interpreted broadly. Current research in numerical analysis includes numerical methods for nonlinear and bifurcation problems, and for boundary integral equations arising from partial differential equations. Recently an interest in parallel algorithms has been developing, in particular, their application in semiconductor device modelling. Current research in applied mathematics includes numerical studies of electromagnetic, acoustic and elastodynamic wave scattering, and bifurcation phenomena associated with capillary-gravity waves. To support our activity in these and other areas we have applied for funds to purchase a MEIKO Computing Surface and related software which would provide us with a transputer based parallel computing environment.

Only a person of proven research record or recognisable research potential will be considered for this position. The new lecturer will be expected to develop independent research and to play an active role in the research activities in the School. At the beginning the teaching load will be commensurate with age and experience. Salary scale is currently 9,260-19,310 UK pounds.

Candidates seeking further information may telephone

John Willis (Bath 826241) or John Toland (Bath 826188)

or contact Alastair Spence via Email (na.spence@score.stanford.edu (NANET) OR ma_as@uk.ac.bath.ux63 (JANET))

CLOSING DATE: 17th June 1988.

APPLICATIONS TO:
Mr. P. J. Hill,
Personnel Officer,
University of Bath,
Claverton Down,
Bath BA2 7AY
U.K.

OVERSEAS applicants should ask their referees to send references direct to The Personnel Officer.

From: Rolf Jeltsch <JELTSCH%DACTH51.BITNET@forsythe.stanford.edu>

Date: Thu, 26 May 88 22:30:30 CET
Subject: Hyperbolic conf. 1990 in Uppsala

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3 RD I N T E R N A T I O N A L C O N F E R E N C E

ON

H Y P E R B O L I C P R O B L E M S

THEORY, NUMERICAL METHODS AND APPLICATIONS

JUNE 11 - 15, 1990

IN

U P P S A L A

AS YOU MAY BE AWARE, THE 2ND INTERNATIONAL CONFERENCE ON HYPERBOLIC PROBLEMS WAS HELD IN AACHEN, IN MARCH 1988. SOME 200 RESEARCHER PARTICIPATED AND ABOUT 17 PANEL LECTURES HAVE BEEN GIVEN AND SOME 90 CONTRIBUTED PAPERS HAVE BEEN DELIVERED. THE PROCEEDINGS WILL BE PRINTED BY THE PUBLISHER VIEWEG. (THE DATES WHEN IT WILL APPEAR WILL BE POSTED ON NA-NET).

IT HAS BEEN DECIDED TO ACCEPT THE GENEROUS OFFER BY PROF. BERTIL GUSTAFSSON TO ORGANIZE THE 3RD INTERNATIONAL CONFERENCE IN 1990 IN UPPSALA, SWEDEN. WE ARE ALL LOOKING FORWARD TO THIS EVENT AND ARE CONVINCED THAT IT WILL BE A SUCCESS.

THE DATES ARE JUNE 11 - 15, 1990. FOR FURTHER DETAILS CONTACT:

PROF. DR. BERTIL GUSTAFSSON,
DEPARTMENT OF COMPUTER SCIENCES
UNIVERSITY OF UPPSALA
STUREGATAN 4 B 2 TR
UPPSALA, SWEDEN

BITNET ADDRESS: BERTILG AT SEMAX51

From: Mats Weidmar <mcvax!enea!mawe@uunet.uu.net>
Date: 25 May 88 22:40:55 GMT
Organization: ENEA DATA AB, Sweden
Subject: Linear programming

I am looking for sources for linear programming algorithms in general, and discrete (integer) solutions in particular.

I am mostly interested in the "trim-loss" problem.

Thanks in advance /Mats Weidmar

From: Richard Brualdi <brualdi@weaver.math.wisc.edu>
Date: Sat, 28 May 88 09:46:20 cdt
Subject: LAA: new editors

Linear Algebra and its Applications is pleased to announce
the appointment of Rajendra Bhatia of the Indian Statistical
Institute in New Delhi, India as an associate editor and the
appointment of Peter Lancaster of the University of Calgary
as an advisory editor.

From: Iain Duff <duff@anl-mcs.arpa>
Date: Tue, 31 May 88 06:57:38 cdt
Subject: CERFACS

CERFACS
Recruitment of PhDs and post-docs.

The European Centre for Research and Training in Scientific
Computation (CERFACS) in Toulouse, France is continuing to expand.
A call for candidates to join CERFACS at or around September 1988
at either the post-doctorate or post-graduate level has just been
made. The PhD grant (initially for two years) is 8700 FFr net per
month, and the post-doctorate grant (annually renewable) is for
12000 FFr net per month. The cost of living in the Toulouse region
is fairly low and, depending on one's tastes, it should be
possible to live fairly well on these salaries.
As is usual in these announcements, there is not much time
before the deadline for receipt of applications. At least a
strong indication of interest should be made to CERFACS,
42 Ave G Coriolis, 31057 Toulouse Cedex, France.
(Tel +33-61-07-96-96, FAX +33-61-07-96-13, Telex 521888F) before
June 15th, preferably including a CV and an indication of the main
interests of the candidate. e-mail can also be sent to me (at
na.duff@score.stanford.edu) although I would prefer if you
simultaneously sent the same communication directly to CERFACS.
There are now four teams at CERFACS, the original ones in
parallel algorithm development and numerical computation,
instability and turbulence, and aerodynamic flows, and a new one in
visualization methods for computational fluid mechanics.
Currently the main machine in the Centre is an ETA-10P,
although there is good access to an IBM 3090/VF (currently 4
processor .. to be upgraded to six), a 4-processor CRAY-2, and a
CRAY X-MP. An Alliant FX/80 (8 processors) and a Gould NP1 (2
processors) will be installed at the Centre in June, and a
hypercube is planned for delivery in September/October.
There are also possibilities of funding visits from more

senior researchers. It is easiest if interested parties contact
me directly.

Iain Duff
Harwell and CERFACS

From: Pat Gaffney <FSCPG%NOBERGEN.BITNET@CORNELLC.CCS.CORNELL.EDU>
Date: Tue, 31 May 88 14:13:07 EMT
Subject: TROMSOE REMINDER

PLEASE BRING SOME CLOTHES WITH YOU TO TROMSOE. NOT SUMMER CLOTHES.

THERE IS STILL SOME SNOW ON THE MOUNTAIN WHERE YOU WILL BE WALKING. THEREFORE PLEASE BRING SOME APPROPRIATE SHOES. REMEMBER YOU WILL HAVE THE OPPORTUNITY TO DO SOME SKIING IF YOU WISH, WE WILL PROVIDE THE EQUIPMENT.

REMEMBER THE LATITUDE OF TROMSOE IS BETWEEN 70 AND 71. THUS THE RANGE OF TEMPERATURES CAN BE FROM ABOVE FREEZING TO 10 DEGREES CENTIGRADE.

REMEMBER TO GET SOME SLEEP THIS WEEK. SEE YOU ABOVE THE ARCTIC CIRCLE.

Pat Gaffney

From: Ken Jackson <krj%csri.toronto.edu@relay.cs.net>
Date: Tue, 31 May 88 20:58:00 EDT
Subject: Toronto ODE Conference

Final Announcement for
The 1988 Conference on the Numerical Solution of IVPs for ODEs
to be held 20-24 June 1988 at the University of Toronto

Organized by
Professors Wayne Enright and Ken Jackson,
Department of Computer Science, University of Toronto,
Toronto, Ontario, Canada, M5S 1A4.
(enright@csri.toronto.edu or krj@csri.toronto.edu)

The Conference.

Currently we have scheduled five 50-minute invited lectures and sixty-two 30-minute contributed talks at "The 1988 Conference on the Numerical Solution of IVPs (Initial-Value Problems) for ODEs (Ordinary Differential Equations)" to be held 20-24 June 1988 in the Department of Computer Science at the University of Toronto. In addition, there will be ample time for informal discussion with

colleagues at the meeting. The invited speakers are: J. C. Butcher, P. Deuflhard, J. Dormand and P. J. Prince, C. W. Gear and L. F. Shampine. (Regrettably, the other two invited speakers, R. Jeltsch and S. P. Norsett, are not able to attend.) The programme for the conference is listed below. Abstracts for all talks will be distributed at the meeting.

In a preliminary conference announcement, we stated that no other form of publication is planned for this meeting. However, this has since changed. Speakers at the conference have the option of submitting a paper on the topic of their talk to a special issue of the SIAM Journal on Scientific and Statistical Computing. (Note that it is not mandatory for speakers to contribute a paper to SISSC.) Contributed papers will be refereed according to the usual SIAM procedures, although we will attempt to expedite the review process. To submit a paper for the special issue, give your manuscript to one of the conference organizers at the meeting. The deadline for submitting a manuscript is 24 June 1988, the last day of the conference.

To facilitate travel arrangements, the conference will close at noon of the final day. The language of the conference will be English.

There will be several other large conferences in Toronto -- including the Economic Summit -- at the same time as our meeting. Therefore, if you have not already reserved accommodation for the conference, we recommend that you do so as soon as possible to avoid disappointment.

The final date for submitting a paper to the conference has long past. However, if you wish to attend the conference but have not yet registered, please print, complete and mail to one of the conference organizers (by regular post -- NOT E-MAIL) the conference registration form below along with your registration fee. Alternatively, you may register at the conference. Also included below is a form to reserve residence accommodation at Whitney Hall -- please print, complete and mail this together with your deposit directly to Whitney Hall -- NOT to the conference organizers. Alternatively, instructions for reserving a room at The Delta Chelsea Inn are provided below.

The Conference Location.

The site of the conference is the University's downtown (St. George) campus. All technical sessions will be held in the Sandford Fleming Building (sometimes called the Sandford Fleming Laboratory), 10 King's College Rd., at the south end of the campus. The main lecture room for the conference is SF1105 on the main floor, east side of the Sandford Fleming Building. Those of you staying in residence accommodation will be housed in Whitney Hall, 85 St. George St., located about 100 meters north of the Sandford Fleming Building. The Delta Chelsea Inn is about a kilometer east of the

Sandford Fleming Building at 33 Gerrard St. W. A map showing the locations of all these buildings is available upon request.

Toronto.

Those of you who have not been in Toronto recently will notice many exciting changes. The cosmopolitan flavour of the city is reflected in the thriving Chinese, Italian, Greek and West Indian communities, to mention only a few. The city has an excellent reputation for fine international cuisine. There is a wide variety of restaurants suiting every taste and pocketbook, from elegant dining rooms to fast-food deli counters. For avid walkers, there are many pleasant strolls around the campus and the numerous parks and gardens nearby in the city. Sites worth seeing include the Royal Ontario Museum, the McLaughlin Planetarium, the Gardiner Museum of Ceramic Art (all on the east side of the University campus), the Art Gallery of Ontario (a few blocks south of the campus), Harbourfront and Ontario Place (both on the lakeshore), The Science Centre (a few kilometers north-east of the campus), as well as the McMichael Canadian Collection (art of "The Group of Seven") and the internationally acclaimed Metropolitan Toronto Zoo (both on the outskirts of Metropolitan Toronto). And of course, there are many shops and boutiques close to the University campus. In addition, Niagara Falls is about 130 km south-west of Toronto; the Shaw Festival Theatre is located a short drive from the Falls in the historic and picturesque town of Niagara-On-The-Lake; and the Shakespearean Festival Theatre is located in Stratford, Ontario, about 150 km west of Toronto. More information about the city and the surrounding areas will be included in your conference registration package.

The average high for Toronto in mid June is about 25C (78F), the average low about 15C (59F), with inclement weather being uncommon. However, the temperature is quite variable at this time of year, and may be considerably warmer or cooler than these averages suggest.

On-Site Registration.

The on-site registration for the meeting will take place in the Atrium outside room SF1105 on the main floor, east side of the Sandford Fleming Building on Sunday, June 19, from 19:30 to 21:00, Monday, June 20, from 8:15 to 9:00, and every other morning of the conference from 8:30 to 9:00. In addition to registration on the Sunday evening, there will be an informal gathering with light refreshments for conference participants and their guests in the Atrium of the Sandford Fleming Building.

If you have registered for the conference, but are not able to come, please inform us of this -- particularly if you have submitted a paper -- so that we can remove your name from the programme. We will refund your conference registration fee if informed before June 10 of your inability to attend the conference. Contact Whitney

Hall or the Delta Chelsea Inn directly for a refund of your room deposit.

Transportation.

Both the University campus and the Delta Chelsea Inn are about a half-hour drive from the Lester B. Pearson International Airport. Taxi or Airport-Limousine fare to either is about $25-30 (Cdn), independent of the number of passengers in the vehicle. Alternatively, there is frequent bus service (every 20 minutes from 5:25 to 22:45) from the airport to the downtown hotels, including the Delta Chelsea Inn. The cost per person is $7.50 (Cdn) one-way or $12.50 (Cdn) return.

Unfortunately, there is no direct bus service between the airport and the University campus. You could, though,

o+ take the airport bus to the the Delta Chelsea Inn,

o+ walk a block north from the Inn to College Street,

o+ walk or take the street-car west about a kilometer to St. George St.,

o+ and then walk about 100 meters north on St. George St. to Whitney Hall.

Alternatively, you could

o+ take an airport bus to the Islington Subway Station,

o+ take the subway east to the St. George Subway Station,

o+ and then walk about 200 meters south on St. George St. to Whitney Hall.

The second alternative is cheaper -- $4.00 (Cdn) one-way or $6.50 return for the airport bus; both the subway and the streetcar cost $1.05 (Cdn) for a single ride or eight tickets or tokens (each good for one ride) for $7 (Cdn). However, the bus service to the Islington Subway Station is less frequent -- about every 40 minutes from 7:00 to 00:30. By the way, there are 24-hour money exchanges in the Toronto airport; I believe they offer competitive rates.

Please circulate this announcement to interested colleagues.

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Tentative Programme for
The 1988 Conference on the Numerical Solution of IVPs for ODEs

If you notice any errors in the tentative programme or if your travel plans prevent you from being able to speak when we have scheduled you, please let us know as soon as possible.

SUNDAY, JUNE 19.

19:30 Registration and informal gathering -- to end about 21:00

MONDAY, JUNE 20.

8:15 Registration

8:50 Opening Remarks

INVITED TALK

9:00 John Butcher
Linear and Non-Linear Stability for General Linear Methods

CONTRIBUTED TALK - PLENARY SESSION

10:00 Martin Berzins
A Fully Automatic Time Integration in the Method of Lines

10:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

11:00 H. W. J. Lenferink
Contractivity Preserving Linear Multistep Methods

11:30 Rudolf Scherer
The Lyapunov Stability of Runge-Kutta Methods

CONTRIBUTED TALKS - PARALLEL SESSION II

11:00 Ewa Weinmuller and Renate Winkler
A Path-Following Algorithm for Singular Boundary Value Problems

11:30 Luca Dieci
Implicit Matrix Schemes for a Class of Matrix Initial Value Problems

12:00 Lunch Break

CONTRIBUTED TALK - PLENARY SESSION

14:00 Jan Verwer
A Method of Lines Analysis of the Peaceman-Rachford ADI Method

CONTRIBUTED TALKS - PARALLEL SESSION I

14:30 Douglas Salane
Incomplete Factorization in a Stiff ODE Solver

15:00 Jan Olav Langseth and Ivar Lie
ODE Aspects of the Moving Finite Element Method

CONTRIBUTED TALKS - PARALLEL SESSION II

14:30 Ming Zhu Liu
A Note on the Stability of Rational Runge-Kutta Methods

15:00 Stig Skelboe
Stability Properties of Backward Euler Multirate Formulas

15:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

16:00 Changhui Wu
Several Schemes for Time Discretisations of Semiconductor Device Models

16:30 Peter Tischer
A New Order Selection Strategy for Ordinary Differential Equation Solvers

CONTRIBUTED TALKS - PARALLEL SESSION II

16:00 Kevin Burrage
(k,l)-Algebraic Stability of Runge-Kutta Methods

16:30 Kris Stewart
Improved Stability for Low Order BDF Methods

END OF THE TECHNICAL SESSIONS

TUESDAY, JUNE 21.

8:30 Registration

INVITED TALK

9:00 Larry Shampine and Przemyslaw Bogacki
The Effect of Changing the Step Size in Linear Multistep Codes

CONTRIBUTED TALK - PLENARY SESSION

10:00 Peter Brown, George Byrne and Alan Hindmarsh
VODE, a Variable-Coefficient ODE Solver

10:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

11:00 Thomas Speer
Squeezing the Most Out of Fifth-Order Radau IIA Runge-Kutta Schemes

11:30 Peter Tischer
A Type-Insensitive Multistep Code for Ordinary Differential Equations

CONTRIBUTED TALKS - PARALLEL SESSION II

11:00 Y. F. Chang
Compound and Coupled Pendula, Multi-Constraint DAE's

11:30 Claus Fuhrer
Differential-Algebraic Formulation and Numerical Treatment of the Equations of the Motion of Constrained Mechanical Systems

12:00 Lunch Break

CONTRIBUTED TALK - PLENARY SESSION

14:00 Uri Ascher
Symmetric Schemes May Be Risky

CONTRIBUTED TALKS - PARALLEL SESSION I

14:30 Michael Knorrenschild
A Regularization Approach for the Solution of Differential-Algebraic Equations

15:00 Benedict Leimkuhler, Linda Petzold and Bill Gear
The Consistent Initialization of Differential-Algebraic Equations

CONTRIBUTED TALKS - PARALLEL SESSION II

14:30 Masaharu Nakashima
Some Methods of Step Size Control for Explicit Pseudo-Runge-Kutta Methods

15:00 Taketomo Mitsui, Tetsuya Sakurai and Hiroshi Sugiura
A Series of Collocation Runge-Kutta Methods

15:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

16:00 R. M. Furzeland
Sensitivity Analysis for Mixed Differential and Algebraic Equations

16:30 Thomas Wielenga

Handling Index Three DAE's in a Commercial Program

CONTRIBUTED TALKS - PARALLEL SESSION II

16:00 Moris Bader
Midas -- the Last Word on Runge-Kutta ???

16:30 K. C. Wade, C. W. Richards and M. G. Everett
A Type Insensitive Runge-Kutta Code

END OF THE TECHNICAL SESSIONS

WEDNESDAY, JUNE 22.

8:30 Registration

INVITED TALK

9:00 Bill Gear
Parallelism: Can ODE Solvers Get It Together?

CONTRIBUTED TALK - PLENARY SESSION

10:00 Ulla Miekkala and Olavi Nevanlinna
Smoothness and Acceleration in Picard-Lindelof Iteration

10:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

11:00 Chris Carter
Highly Parallel Methods for Solving Stiff ODEs

11:30 Alfredo Bellen, Rossana Vermiglio and Marino Zennaro,
Parallel ODE-Solvers with Step Size Control

CONTRIBUTED TALKS - PARALLEL SESSION II

11:00 Kenneth Clark and Linda Petzold
Numerical Solution of Boundary Value Problems in
Differential-Algebraic Systems

11:30 Michel Roche
Runge-Kutta Methods for DAE's of Index 2: Theory and
Implementation

12:00 Lunch Break

CONTRIBUTED TALKS - PARALLEL SESSION I

14:00 Ian Gladwell, Larry Shampine and Richard Brankin

Starting Adams and BDF Codes Using Runge-Kutta Interpolants

14:30 K. Gustafsson and Gustaf Soderlind
A Control Theoretic Approach to Stepsize Control in ODE Solvers

15:00 George Hall
Algorithms for Stepsize Control in the Numerical Solution of ODE's

CONTRIBUTED TALKS - PARALLEL SESSION II

14:00 C. Costabile and F. Costabile
Economized Formulae of Nystrom for Initial Value Problems

14:30 Hon-Wah Tam
The Shifted Adams Method

15:00 Fen-Lien Juang
Accuracy Increase in Waveform Relaxation

15:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

16:00 Per Grove Thomsen
Dealing with Changes of State in ODE-Systems

16:30 George Corliss and Y. F. Chang
Multiple G-Stop Facility in ATOMFT, a Taylor Series
Ordinary Differential Equation Solver

CONTRIBUTED TALKS - PARALLEL SESSION II

16:00 Leonidas C. Barroso and Therezinha Chaves
Adams Type Cyclic Methods

16:30 Peter Albrecht
Linear Cyclic Methods: Considerations on their Implementation

END OF THE TECHNICAL SESSIONS

THURSDAY, JUNE 23.

8:30 Registration

INVITED TALK

9:00 Peter Deuflhard
Uniqueness Theorems for Stiff and Implicit ODE Initial Value
Problems

CONTRIBUTED TALK - PLENARY SESSION

10:00 George Corliss
Toward Tighter Inclusions of Solutions of Ordinary Initial Value Problems

10:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

11:00 Winfried Auzinger and Reinhard Frank
Asymptotic Expansions of the Global Discretization Error for Stiff Problems

11:30 Michel Roche, Peter Kaps and Siegfried Scholz
Various Order Concepts for Rosenbrock Methods

CONTRIBUTED TALKS - PARALLEL SESSION II

11:00 Mohamed Kamel and Grantham Pang
A Knowledge Based System for Automatic Selection of Initial Value ODE System Solvers

11:30 Bill Schiesser
An Educational, Low-Order, Generic Model for HIV Transmission

12:00 Lunch Break

CONTRIBUTED TALKS - PARALLEL SESSION I

14:00 Fred Krogh
The ODE User Interface

14:30 Anthony Maeder
A Versatile IVP Solving Software Environment

15:00 Niels Houbak
The Concepts of SIL

CONTRIBUTED TALKS - PARALLEL SESSION II

14:00 George Micula
Numerical Solution of Differential Equations with Deviating Argument Using Spline Functions

14:30 David Wille
The Propagation of Derivative Discontinuities in Systems of Delay Differential Equations

15:00 Alfredo Bellen, Zdzislaw Jackiewicz, Rossana Vermiglio and Marino Zennaro,
Stability Analysis of Runge-Kutta Methods for Volterra Integral Equations of the Second Kind

15:30 Coffee Break

CONTRIBUTED TALKS - PARALLEL SESSION I

16:00 Saideh Mortezaie
Modified Adams Methods for the Solution of Non-Stiff
Initial Value Problems

16:30 David Voss and Mark Casper
Efficient Split Linear Multistep Methods for Stiff Odes

CONTRIBUTED TALKS - PARALLEL SESSION II

16:00 Peter Harley and Jack Lambert
A Fourth-Order Runge-Kutta Algorithm Based on a New Error Estimate

16:30 Desmond Higham
Defect Estimation in Adams PECE Codes

END OF THE TECHNICAL SESSIONS

FRIDAY, JUNE 24.

8:30 Registration

INVITED TALK

9:00 John Dormand and Peter Prince
Practical Runge-Kutta Processes

CONTRIBUTED TALKS - PLENARY SESSION

10:00 Kevin Burrage, John Butcher, Chris Carter and Fred Chipman
Progress with Singly-Implicit Methods

10:30 Coffee Break

11:00 Philip Sharp and Jerry Fine
R-Stable (3,4) Singly Diagonally Implicit Runge-Kutta Nystrom
Pairs of Dispersive Orders Four and Six

11:30 Roland England
Multistage and Multistep Methods, Dichotomic Stability
and Error Estimation

12:00 Ray Zahar
An Implicit Adaptive Series Method for Stiff Equations

12:30 Closing Remarks

END OF THE CONFERENCE

========== CUT HERE ==========

Conference Registration Form
The 1988 Conference on the Numerical Solution of IVPs for ODEs

To register for the conference, please print this form, complete it and mail it (by regular post -- NOT E-MAIL) with your remittance to:

Prof. K. R. Jackson, Computer Science Dept., University of Toronto, Toronto, Ontario, Canada M5S 1A4.

Registration fee (in Canadian dollars):

___ Regular after 13 May 1988 - $75.00

___ Student after 13 May 1988 - $30.00

Please make cheques or bank drafts payable to the University of Toronto in Canadian funds or the U.S. equivalent. Those outside Canada or the U.S. should send a bank draft drawn on a Canadian bank or an International Postal Money Order.

Requests for registration fee refunds will be honored until 10 June 1988.

Name: _____ Organization: _____
Address: _____
City: _____ Prov./State. _____ PC/Zip: _____
Country: _____ Telephone: _____

========== CUT HERE ==========

Residence Accommodation - Whitney Hall - University of Toronto
The 1988 Conference on the Numerical Solution of IVPs for ODEs

To reserve a residence room in Whitney Hall, please print this form, complete it and mail it with your remittance to:

Num. Sol. of IVPs for ODEs Conf., Whitney Hall,
85 St. George St.,
Toronto, Ontario,
Canada M5S 2E5.

Please check below the type of room you wish to reserve. (Rates in Canadian dollars include breakfast and local taxes)

___ Single - $35.00 / night
___ Twin (2 single beds) - $23.00 / person / night

Name: _____ Organization: _____
Address: _____
City: _____ Prov./State. _____ PC/Zip: _____
Country: _____ Telephone: _____
Arrival Date: _____ Departure Date: _____
Sharing with: _____

Deposit: ___ I have enclosed my deposit cheque for $25.00 per person payable to the University of Toronto in Canadian funds or U. S. equivalent.

I prefer to pay by credit card:
___ Visa ___ Mastercard.
Card Number: _____ Expiry Date: _____
Signature: _____ Date: _____

+ Reservations must be received in Toronto by 13 May 1988 to allow time for confirmations to be mailed.

+ Refunds of deposits will be made provided notice of cancellation is received prior to 10 June 1988.

+ Residence facilities: washrooms are communal; bedding, towels, and soap are provided.

+ Parking is available at $6.00 per day at 113 St. George St.

========== CUT HERE ==========

Delta Chelsea Inn
33 Gerrard St. W., Toronto, Ontario, Canada M5G 1Z4.

Conference rates (in Canadian dollars):

+ $88.00 single occupancy;
+ $103.00 double occupancy per room per night;
+ no meals included.

The hotel recommends that to make reservations you

+ phone toll free 800-268-1133 in Canada or Continental U. S.;

+ others should either phone 416-927-1133 or send a Telex to the attention of Annemieke Verheyen at 06218441.

+ The hotel will acknowledge all Telex reservations by return

Telex.

To attain the special conference rate,

+ quote the "Q#" GDODE when making your reservation, and

+ note that you will attend "The International Conference on ODEs sponsored by the University of Toronto".

Also, be sure to state

+ your full name and address,
+ type of room required,
+ dates of arrival and departure,
+ method of payment.

The hotel will hold reserved rooms until 6 p.m. on the scheduled day of arrival. They strongly recommend that you "guarantee" your room for arrival after 6 p.m. by giving a deposit or credit card number.

Cancellations must be received prior to 6 p.m. on the scheduled day of arrival to avoid a "no show" charge.

Date: Mon 30 May 88 13:16:35-MDT
From: Peter Alfeld <MA.ALFELD%SCIENCE.UTAH.EDU@Forsythe.Stanford.EDU>
Subject: request for info

I am interested in computer codes that do the equivalent of a triangulation in more than three variables. For example, given a collection of points in R**3, find a collection of tetrahedra that have the points as vertices and that tessellate the convex hull of the points.

Any information would be appreciated.

Peter Alfeld, Dept. of Math., Univ. of Utah, Salt Lake City, Utah 84112, 801-581-6842, or
ALFELD@SCIENCE.UTAH.EDU
NA.ALFELD@SCORE.STANFORD.EDU

End of NA Digest

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