Mathematics Calendar

The most comprehensive and up-to-date Mathematics Calendar information is available on e-MATH at `http://www.ams.org/mathcal/`.

June 1998

June–July **MODELLING '98, 1st IMACS Conference on Mathematical Modelling and Computational Methods in Mechanics and Geodynamics**, Prague, Czech Republic. (Oct. 1997, p. 1157)

* 1–3 **Romanian-German Seminar on Approximation Theory (ROGER–98)**, Mathematical Department of the Faculty of Sciences, Universitatea "Lucian Blaga", Sibiu, Romania.

Organizing Committee: I. Gavrea, H. H. Gonska (Duisburg), M. Ivan (Cluj-Napoca), A. Lupas, L. Lupas (Sibiu).

Aim: The aim of the seminar is to bring up some unsolved and open problems from the fields of constructive function theory, approximation theory, numerical analysis, or special functions.

Information: Information and registration may be obtained from A. Lupas, Univ. of Sibiu, Faculty of Sciences, Dept. of Mathematics, Str. I. Ratiu nr. 7, RO-2400 Sibiu, Romania, or via e-mail at `lupas@cs.sibiu.ro`.

1–4 **IASTED International Conference on Computer Graphics and Imaging**, Halifax, Canada. (Dec. 1997, p. 1497)

1–4 **Mathematics and Design 98**, The University of the Basque Country, San Sebastian, Spain. (Dec. 1997, p. 1497)

1–5 **IMA Workshop: Animal Locomotion and Robotics**, University of Minnesota, Minneapolis, Minnesota. (May 1998, p. 636)

1–5 **Fifth International Conference on p-Adic Functional Analysis**, A. Mickiewicz University of Poznań, Poland. (Sept. 1997, p. 1028)

1–5 **Fourth International Conference on Mathematical and Numerical Aspects of Wave Propagation**, Colorado School of Mines, Golden, Colorado. (Jan. 1998, p. 110)

1–5 **Model Theory, Algebra and Arithmetic**, Mathematical Sciences Research Institute, Berkeley, CA. (Sept. 1997, p. 1028)

1–6 **Shape Optimization**, Troia, Portugal. (May 1998, p. 636)

1–6 **Table Ronde de Géométrie Pseudo-Riemannienne Globale**, Institut Élie Cartan (IECN), Université Henri Poincaré, Nancy I, France. (May 1998, p. 636)

* 1–10 **Advanced Course and Workshop on Mathematical Control Theory**, Grand Hotel Bellavista, Levico Terme (Trento), Italy.

Sponsors: This event is also sponsored by G.N.A.F.A.-C.N.R. and M.U.R.S.T. project "Problemi nonlineari nell'Analisi e nelle Applicazioni". The advanced course (June 1–6) will be followed by a workshop (June 8–10).

Scientific Organizers: Advanced course: M. Bardi (Padova); workshop: M. Bardi, P. Cannarsa (Roma II), and I. Capuzzo Dolcetta (Roma I).

Courses: The school includes the following 5 courses, of 5 hours each: (1) P. Cannarsa (Roma II): *Dynamic programming methods for optimal control of evolution equations*; (2) I. Capuzzo Dolcetta (Roma I): *Viscosity solutions of dynamic programming equations: The finite dimensional case*; (3) F. H. Clarke (Lyon I): *Nonsmooth analysis and the control of ordinary differential equations*; (4) A. Isidori (Roma I): *Stabilization of nonlinear systems*; (5) H. J. Sussmann (Rutgers): *Differential-geometric and nonsmooth methods in finite-dimensional optimal control.*

Invited Speakers: O. Alvarez (Rouen), A. Bacciotti (Torino), G. Buttazzo (Pisa), M. Falcone (Roma I), H. Frankowska (Paris-Dauphine), H. Ishii (Tokyo), R. Jensen (Chicago), V. Komornik (Strasbourg), Y. S. Ledyaev (Kalamazoo), P. L. Lions (Paris-Dauphine), P. Loreti (IAC-CNR Roma), L. Pandolfi (Torino), J. P. Puel (Versailles), F. Rampazzo (Padova), A. Siconolfi (Roma I), C. Sinestrari (Roma II), P. Soravia (Padova), G. Stefani (Firenze), S. Zagatti (SISSA Trieste), T. Zolezzi (Genova), E. Zuazua (Madrid).

Deadline: Application deadline: April 23, 1998.

Information: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento), Italy; tel: +39-461-881628; fax: +39-461-810629; e-mail: `michelet@science.unitn.it`.

3-6 Seventh Conference of the International Linear Algebra Society, The Hans Schneider Linear Algebra Conference, University of Wisconsin-Madison, Madison, Wisconsin. (Nov. 1997, p. 1362)

4-6 Basle Geometry Days, University of Basle, Basel, Switzerland. (May 1998, p. 636)

4-10 1998 Barcelona Conference on Algebraic Topology, Centre de Recerca Matemàtica, Bellaterra, Spain. (Feb. 1998, p. 293)

* **5-8 VIIth Oporto Meeting on Geometry, Topology and Physics**, Faculdade de Ciencias da Universidade do Porto, Oporto, Portugal.

Aim: The aim of the Oporto meetings is to bring together mathematicians and physicists interested in the interrelation between geometry, topology, and physics and to provide them with a pleasant and informal environment for scientific interchange.

Topics: The main topics will be: Topological Quantum Field Theory; Strings and Dualities; and Deformation Quantization. The meeting will consist largely of short courses, of approximately three lectures each, given by the main speakers, supplemented by a limited number of seminars, details of which will be announced later. The talks are at the advanced graduate or postdoctoral level, and should be of interest to all researchers wishing to learn about recent developments in the overlap between geometry, topology, and physics.

Speakers: The main speakers together with the titles of their minicourses are as follows: J. Baez (Univ. of California, Riverside): Spin Foam Models of Quantum Gravity; B. Greene (Columbia Univ.): String Theory on Calabi-Yau Manifolds; L. Takhtajan (State Univ. of New York, Stony Brook): Deformation Quantization of Complex Poisson Manifolds; B. Tsygan (Pennsylvania State Univ.): Recent Developments in Deformation Quantization; D. Yetter (Kansas State Univ.): Deformation Theory for Categories with Structure.

Organizing Committee: P. Gothen (`pbgothen@fc.up.pt`), J. Mourao (`jmourao@galaxia.ist.utl.pt`), R. Picken (`picken@math.ist.utl.pt`), J. N. Tavares (`jntavar@fc.up.pt`).

Information: For updated information see the Internet page: `http://www.fisica.ist.utl.pt/~jmourao/om/omvii/om98b.html`.

7-19 NATO ASI—1998 CRM Summer School, Banff, Alberta, Canada. (Feb. 1998, p. 293)

* **8-10 From Erdős to Algorithms: Applications of the Probabilistic Method (A joint DIMACS-DIMATIA workshop)**, DIMACS Center, Rutgers University, Piscataway, New Jersey

Contact: J. Spencer, `spencer@cs.nyu.edu`.

Local Arrangements: P. Pravato, DIMACS Center; `pravato@dimacs.rutgers.edu`; tel: 732-445-5929.

Focus: The "probabilistic method" is a legacy of Paul Erdős that continues to grow and flourish and have powerful applications in all parts of the mathematical sciences. We will explore current results in discrete mathematics that use probabilistic existence arguments and require the use of sophisticated probability concepts. We will further explore the connection to modern issues in computer science by examining the possible implementations of probabilistic existence arguments by randomized or deterministic algorithms.

Information: `http://dimacs.rutgers.edu/Workshops/index.html`.

8-12 IMA Workshop: Continuum Mechanics and Nonlinear Partial Differential Equations, University of Minnesota, Minneapolis, Minnesota. (may 1998, p. 636)

8-12 The 1998 Barrett Memorial Lectures: Discrete Conformal Geometry, University of Tennessee, Knoxville, Tennessee. (Mar. 1998, p. 420)

9-11 1998 International Conference on Dynamic Systems and Differential Equations, Shanghai Jiao Tong University, Shanghai, The People's Republic of China. (Sept. 1997, p. 1028)

* **10-12 Workshop on European Scientific and Industrial Collaboration on Promoting Advanced Technologies in Manufacturing (WESIC'98)**, Girona, Spain.

Aim: The aim of the First WESIC is to provide a forum where companies, universities, institutes, and research centers may interchange experiences in meeting the needs of advanced technology in manufacturing systems. The workshop will be of particular interest to those companies and institutions that are interested in collaborating in scientific projects in their sector. The intention is to identify common points of interest in order to participate in collaborative actions such as: research agreements, integration of Ph.D. students in European companies, transfer of technology, thematic networks, European Community research projects, ets.

Focus: The program will consist of two days of presentation per sector (15 minutes for each presentation), and one day of specific meetings and round table discussions.

Topics: The workshop will focus on control and related technologies applied to the following subjects: Robotics integated in manufacturing; Control of mechatronic systems; Computer integrated manufacturing; Image processing and computer vision; Intelligent systems in manufacturing and control; Quality control; Communications and distributed systems.

Program Committee: J. van Amerongen (Univ. Twente, The Netherlands), J. Batlle (Univ. of Girona, Spain; chair), S. Boverie (Siemens Automotive, France), C. Cappadozzi (Consorzio AURORA, Italy), A. Casals (Polytechnical Univ. Catalunya, Spain), V. Graefe (Univ. der Bundeswehr, Germany), A. Halme (Helsinki Univ. of Tech., Finland), J.-C. Laprie (Dir. du LAAS-CNRS, France), R. Milne (Intelligent Appl. Ltd., Scotland), E. M. Mouaddib (Univ. Jules Verne, France), M. Polkinghorne (South West Innovation Relay Centre, UK), J. de la Riva (Integral Interface, Spain), G. Roberts (Univ. of Wales Coll., UK), U. Stenta (Univ. Rome, Italy), M. Vassilaki (SPEED Co., Greece).

Organizing Committee: J. Aguilar, J. Amat, R. Bischoff, L. Kaiser, A. B. Michael, J. Salvi, T. Schunberg.

Information: WESIC'98, P. Eyskens, EIA Dept., e-mail: `patricia@eia.udg.es`; tel: +34-72-418474; +34-72-418956; fax: +34-72-418098; `http://eia.udg.es/wesic98/`.

11-13 Lehigh University Geometry/Topology Conference, Lehigh University, Bethlehem, Pennsylvania. (May 1998, p. 636)

11-16 Venice-2/Symposium on Applied and Industrial Mathematics, Venice, Italy. (May 1998, p. 637)

* **12-13 A Workshop on Industrial Mathematics**, Utah State University, Logan, Utah.

Invited Speakers: E. Cumberbatch (Claremont Graduate Univ., Claremont, CA), I. L. Davis (Thiokol Corp, Ogden, UT), G. Forest (Univ. of North Carolina), K. E. Jordan (IBM T. J. Watson Research Center), S. P. Keeler (The Boeing Company), D. S. Ross (Kodak Research Labs.), F. Santosa (Univ. of Minnesota, Minneapolis).

Information: See the Web site `http://www.jk.math.usu.edu/IMS/`, or contact any of the following: J. Koebbe, `koebbe@sunfs.math.usu.edu`; X. Ren, `ren@sunfs.math.usu.edu`; or E. Stone, `stone@sunfs.math.usu.edu`.

12-13 The Third Biennial Symposium on Mathematical Modeling in the Undergraduate Curriculum, University of Wisconsin, La Crosse, Wisconsin. (Jan. 1998, p. 111)

12-18 NSF/CBMS Regional Conference in the Mathematical Sciences, Fort Collins, Colorado. (Mar. 1998, p. 421)

13-15 CMS Summer 1998 Meeting, University of New Brunswick, Saint John, New Brunswick. (Mar. 1998, p. 421)

13-20 Dynamical Systems and Small Divisors, Grand Hotel San Michele, Cetraro (Cosenza), Italy. (May 1998, p. 637)

15-17 Conference on Advances in Applied and Computational Mathematics, Mathematical Sciences Research Institute, Berkeley, California. (Feb. 1998, p. 293)

* **15-18 Hopf Algebras and Quantum**

Groups, Free University of Brussels (VUB), Brussels, Belgium.

Scientific Committee: S. Caenepeel (Brussels), S. Dascalescu (Bucharest), S. Montgomery (Univ. of Southern California), H.-J. Schneider (München), M. Van den Bergh (Hasselt), F. Van Oystaeyen (Antwerp).

Organizing Committee: S. Caenepeel (Brussels), G. Militaru (Bucharest), Z. Shenglin (Fudan Univ.).

Invited Lecturers: N. Andruskiewitsch, S. Dascalescu, C. Kassel, L. Lebruyn, A. Masuoka, S. Montgomery, G. Militaru, H.-J. Schneider, D. Stefan, A. Van Daele, S. Woronowicz, Y. Zhang.

Registration: The deadline for registration is May 4, 1998. After this date hotel accommodation at the special congress rate cannot be guaranteed. There will be no registration fee. Lunches and a Congress dinner will be organized, and a contribution will be asked to those who want to join the group for lunch or Congress dinner. These contributions should be paid at the beginning of the conference.

Proceedings: The Proceedings of the conference will be submitted for publication in Marcel Dekker's blue series "Lecture Notes in Pure and Applied Mathematics". Each paper will be refereed individually. The deadline for submitting a paper for the proceedings is November 30, 1998. If you intend to submit a paper, please let the organizers know, so that they can mention your name and the title of your paper in the first proposal to Marcel Dekker.

Information: S. Caenepeel, Faculty of Applied Sciences, Free Univ. of Brussels (VUB), Pleinlaan 2, B-1050 Brussels, Belgium; fax: 32-2-629-28-59; e-mail: `scaenepe@vub.ac.be`.

* **15–19 International Conference on Integral Quadratic Forms and Lattices**, Seoul National University, Seoul, Korea.

Topics: Recent developments in the theory of integral quadratic forms and lattices and its applications will be discussed.

Organizers: J. S. Hsia (Ohio State Univ., `jshsia@math.ohio-state.edu`), M.-H. Kim (Seoul National Univ., `mhkim@math.snu.ac.kr`), Y. Kitaoka (Nagoya Univ., `kitaoka@math.nagoya-u.ac.jp`), and R. Schulze-Pillot (Univ. of Saarlandes, `schulzep@count.math.univ-sb.de`).

Invited Speakers: C. Bachoc (Univ. of Bordeaux), A. M. Berge (Univ. of Bordeaux), W.-K. Chan (Univ. of Southern California), N. Dummigan (Northern Illinois Univ.), A. Earnest (Southern Illinois Univ.), D. Estes (Univ. of Southern California), K. Hashimoto (Waseda Univ.), Y. Hironaka (Shinshu Univ.), J. S. Hsia (Ohio State Univ.), D. James (Pennsylvania State Univ.), M. Joechner (Germany), H. Katsurada (Muroran Inst. Tech.), M.-H. Kim (Seoul National Univ.), Y. Kitaoka (Nagoya Univ.), J. Martinet (Univ. Bordeaux), G. Nebe (RWTH Aachen), V. Nikulin (Steklov Inst. Math.), R. Schulze-Pillot (Univ. of Saarlandes), P. Sole (Univ. of Sophia-Antipolis), P. -H. Tiep (Ohio State Univ.), T.-H. Yang (Univ. of Michigan), F. Xu (China), and more.

Information: `http://www.garc.snu.ac.kr/seminar/lattices.html`.

15–19 International Conference on Local Differentiable Dynamics and Applications to Bifurcation Theory, Limburgs Universitair Centrum (L.U.C.), Diepenbeek, Belgium. (Mar. 1998, p. 421)

15–20 Second International Conference on Differential Equations and Applications, St. Petersburg State Technical University, St. Petersburg, Russia. (Oct. 1997, p. 1157)

16–19 Conference on the Theory of Phase Transitions and Free Boundary Problems, Center for Mathematical Sciences, Zhejiang University, Hangzhou, China. (Mar. 1998, p. 421)

* **16–19 4th Annual Conference for African-American Researchers in the Mathematical Sciences**, Rice University, Houston, Texas.

Goal: The main goal of this conference is to highlight current work by African-American researchers and graduate students in mathematics. This conference will strengthen the mathematical sciences by encouraging the increased participation of African-American and underrepresented groups into the field, facilitating working relationships between them and helping to cultivate their careers. In addition to the talks there will be a graduate student poster session and tutorials on topics in mathematics and computer science. These talks, presentations, and discussions will bring a broader perspective to the critical issues involving minority participation in mathematics.

Invited Speakers: E. R. Barnes, J. E. Brown, J. H. Curry, A. Fauntleroy, C. R. Hardnett, S. D. Hill, Y. D. Jean, W. A. Massey, C. McMillan, R. E. Megginson, R. Moten, M. A. S. Smith, R. A. Tapia, E. Terry, D. C. Williams, L. S. Williams, and P. J. Williams.

Contributed Poster Session: Lodging and transportation are available to authors of posters selected for the conference. Please indicate your intent to participate and send your title and abstract by e-mail (please send only a textfile) to W. A. Massey (908-582-3225, `will@research.bell-labs.com`) no later than May 15.

Sponsor: Bell Laboratories of Lucent Technologies.

Organizers: N. Dean, W. Massey, C. McZeal, R. Tapia, D. Williams, and P. Williams.

Information: Contact T. Chatman, CRPC Manager of Outreach Programs, at `tlc@cs.rice.edu`, tel: 713-285-5180, or fax: 713-285-5136; Web address: `http://www.crpc.rice.edu/CRPC/`.

17–23 6th Purdue International Symposium on Statistics, West Lafayette, Indiana. (Sept. 1997, p. 1028)

19–22 Conference on Control of Distributed Parameter and Stochastic Systems, Hangzhou, China. (Mar. 1998, p. 422)

19–23 International Interdisciplinary Symposium: Mathematics in the Sciences, Leipzig, Germany. (Mar. 1998, p. 422)

21–24 LICS'98 (The Thirteenth Annual IEEE Symposium on Logic in Computer Science, Indiana University Conference Center, Indianapolis. (Sept. 1997, p. 1029)

21–26 5th International Conference on Teaching Statistics (ICOTS-5), Singapore, Malaysia. (Apr. 1998, p. 531)

21–26 Thirteenth U.S. National Congress of Theoretical & Applied Mechanics, University of Florida, Gainesville, Florida. (Sept. 1997, p. 1029)

* **21–27 EC Summer School on Astrophysical Discs**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Aim: This summer school, directed towards advanced graduate students, postdoctoral fellows, and researchers is intended to cover the physical processes that occur in astrophysical discs. Hydromagnetic processes, turbulence, and external forcing will be considered. Discs in the context of active galactic nuclei, galaxy discs, protostars, and close binary systems will be discussed.

Organizing Committee: J. Goodman (Princeton), J. Papaloizou (QMW), J. Pringle (Cambridge), and J. Sellwood (Rutgers).

Lecturers (tent.): A. Fridman, C. Gammie, G. Laughlin, D. N. C. Lin, B. Mathieu, R. Narayan, E. Ostriker, J. Papaloizou, J. Pringle, R. Pudritz, J. Sellwood, A. Toomre, and I. Yi.

Grants: The conference is supported by a grant from the European Community, which will provide funding towards the registration, travel, and subsistence costs of selected young (under 35 years) participants. Applications from women and anyone living in Greece, Ireland, and Portugal and other less-favoured regions of the European Community are particularly encouraged. Early application for grants is advisable. Other limited funds exist for participants from outside the EC. Self-supporting participants of any age and nationality are welcome to apply.

Applications: The workshop will take place at the Newton Institute, and accommodations for participants will be provided at Wolfson Court, adjacent to the Institute. The conference package costs £350, which includes registration fees, accommodations, breakfast and evening meals, plus lunch and refreshments during the days that the workshop takes place. Closing date for the receipt of applications is April 20, 1998.

Information: Further information and application forms are available from the World Wide Web at `http://www.newton.cam.ac.uk/programs/dad.html`, where information about the main program and general information about the Newton Institute can also be found. Completed application forms should be sent to H. Hughes, Isaac Newton Institute for Mathematical Sciences,

20 Clarkson Road, Cambridge CB3 0EH, UK; tel: (01223) 335999; fax: (01223) 330508; e-mail: h.hughes@newton.cam.ac.uk.

21–27 Groups of Finite Morley Rank, Anogia, Crete, Greece. (May 1998, p. 637)

22–25 IMACS International Symposium on Soft Computing in Engineering Applications (SOFTCOM'98), Athens, Greece. (Apr. 1998, p. 531)

22–26 Low Dimensional Topology—The KirbyFest, Mathematical Sciences Research Institute, Berkeley, California. (May 1998, p. 637)

22–26 The Eighth International Conference on Fibonacci Numbers and Their Applications, Rochester, New York. (Sept. 1997, p. 1029)

22–26 Mathematical Results in Quantum Mechanics (QMath7), Doppler Institute of the Czech Technical University, Prague, Czech Republic. (Mar. 1998, p. 422)

* **22–26 Positivity and Its Applications (In Memory of C. B. Huijmans)**, Middle East Technical University, Ankara, Turkey.
Sponsor: Scientific and Research Council of Turkey.
Organizing Committee: Y. Abramovich, yabramovich@math.inpui.edu; C. D. Aliprantis, raliprantis@math.inpui.edu; S. Alpay, safak@rorqual.cc.metu.edu.tr; and A. Wickstead, A.Wickstead@Queens-Belfast.AC.UK.
Speakers: Y. Abramovich, C. D. Aliprantis, S. Alpay, W. Arendt, A. Bukhvalov, G. Buskes, P. Dodds, Z. Ercan, W. A. Feldman, Y. Gordon, H. Gurcay, F. Hernandez, V. Khudalov, A. Kitover, A. G. Kusraev, S. S. Kutateladze, W. Luxemburg, P. Meyer-Nieberg, R. Nagel, V. Oliker, M. Orhon, B. de Pagter, M. Pliev, I. Polyrakis, A. C. M. Van Rooij, A. R. Schep, G. Stotaev, V. C. Troitsky, B. Turan, L. Tzafriri, A. Wickstead.

22–26 Third International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing, The Claremont Colleges, Claremont, California. (Oct. 1997, p. 1158)

* **22–27 The Fifth International Symposium on Effective Methods in Algebraic Geometry (MEGA 98)**, Universite de Rennes, Saint Malo, France.
Topics: Effective methods and theoretical and practical complexity issues in: commutative algebra, geometry, real geometry, algebraic number theory, algebraic geometry and related fields; algebraic analysis of differential equations, differential geometry, associative algebras, group theory, algebraic groups and Lie algebras, algebraic and differential topology, as well as applications of these fields.
Conference Committee: A. M. Cohen (Eindhoven), J. H. Davenport (Bath), A. Galligo (Nice), D. Yu. Grigoriev (Univ. Park/St. Petersburg), J. Heintz (Santander, Buenos Aires), D. Lazard (Paris), T. Mora (Gen-

ova), M. Pohst (Berlin), M. van der Put (Groningen), T. Recio (Santander), M.-F. Roy (Rennes, chairwoman), B. Sturmfels (Berkeley/Kyoto), C. Traverso (Pisa).
Program: The program will include invited lectures, accepted papers, software demonstrations.
Invited Lectures: H. Kerksen (Basel/Brandeis): Constructive invariant theory; J.-C. Faugere (CNRS, Paris VI): New generations of Groebner basis algorithms; A. Mac Intyre (Oxford Univ.): *o*-minimal expansions of the Real: Characterization and Pfaffian closure; V. Retakh (Arkansas St. Univ.): Noncommutative algebra and geometry: A down-to-earth approach; N. Takayma (Kobe Univ.): Algorithms for differential operators and their applications to algebraic geometry.
Information: For any further information related to the conference, or any special problem or request, please contact directly: by e-mail: mega98@univ-rennes1.fr; by fax to Mega 98: 33 (0) 2-99-28-67-90; by ordinary mail at the following address: mega98, IRMAR, Campus de Beaulieu, 35042 Rennes CEDEX, France. Information about Mega 98 can be found at http://www.maths.univ-rennes1.fr/~mega98/.

22–27 Third Siberian Congress on Industrial and Applied Mathematics (INPRIM-98) dedicated to the memory of S. L. Sobolev (1908–1989), Novosibirsk Akademgorodok, Russia. (Sept. 1997, p. 1029)

* **22–28 Workshop on Mathematical Finance**, Sophus Lie Center, Nordfjordeid, Norway.
Focus: The purpose of the workshop is to bring together established researchers and students to discuss the latest results in this active and fast-developing area of stochastic analysis. The program will consist of lectures given by the main speakers, as well as contributed talks from other participants.
Main Speakers: M. H. A. Davis (Tokyo-Mitsubishi International) and I. Karatzas (Columbia Univ.).
Organizing Committee: K. Aase (NHH, Bergen), B. Oksendal (Univ. of Oslo), J. Paulsen (Univ. of Bergen), K. Reikvam (Univ. of Oslo).
Sponsors: NorFa, NFR, Dept. of Mathematics, University of Oslo and Sogn og Fjordane Fylkeskommune.
Information: Contact either B. Oksendal or K. Reikvam at Dept. of Mathematics, Univ. of Oslo, Box 1053 Blindern, N-0316 Oslo, Norway; oksendal@math.uio.no or kre@math.uio.no; fax: +47-22854349.

22–July 3 Mathematics and Molecular Biology: Science for the 21st Century, University of California at Berkeley, California. (Mar. 1998, p. 422)

22–July 10 Foundations and Developments of Mathematical Economics, Accademia Aeronautica, Pozzuoli-Napoli, Italy. (Apr. 1998, p. 531)

22–August 28 Astrophysical and Geophysical Flows as Dynamical Systems, GFD Summer Study Program, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts. (Mar. 1998, p. 422)

23–27 Twenty-second Summer Symposium in Real Analysis, University of California, Santa Barbara, California. (May 1998, p. 637)

24–26 Centennial Congress on M. C. Escher (1898–1972), University of Rome "La Sapienza", Rome, Italy. (Feb. 1998, p. 293)

24–27 Thirteenth Summer Conference on Topology and Its Applications with Workshops on Set-Theoretic Topology and Topological Groups, Universidad Nacional Autónoma de México (UNAM), Mexico City, D.F. Mexico. (Mar. 1998, p. 423)

25 LICS'98 Workshop on Formal Methods and Security Protocols, Indianapolis, Indiana. (Jan. 1998, p. 111)

25 LICS'98 Workshop on Logic and Diagrammatic Information (LDI'98), Indianapolis, Indiana. (Jan. 1998, p. 111)

25–26 8th Stockholm Optimization Days, KTH (Royal Institute of Technology), Stockholm, Sweden. (Apr. 1998, p. 532)

25–27 International Conference on Scientific Computing and Mathematical Modeling IMACS'98, Alicante, Spain. (Jan. 1998, p. 111)

* **25–27 7th National Conference: Creating Undergraduate Research Opportunities in Changing Communities**, Occidental College, Los Angeles, California.
Information: E. L. Montgomery, Membership & Meetings Coordinator, Council on Undergraduate Research, 734 15th Street, NW, Suite 550, Washington, DC 20005; tel: 202-783-4810; fax: 202-783-4811; Web site: http://www.cur.org/; e-mail: cur@cur.org.

* **26–27 DIMACS Workshop on Combinatorial Clustering and Multi-Domain Protein Structure Analysis**, DIMACS Center, Rutgers University, Piscataway, New Jersey.
Goal: The combinatorics, graph theory and algorithms branches of discrete mathematics are powerful techniques for use in analysis of diverse sets of data. Combinatorics introduces clustering models, forms a basis for the interpretation of results, and brings new ideas to clustering methods. The area of combinatorial clustering provides new opportunities for systematic (routine) and comprehensive study of very large databases containing highly complex non-regular elements. However, researchers developing methods for combinatorial clustering often do not collaborate with specialists in the creation, management, and analysis of large, complex databases. The goal of this workshop is to foster and facilitate such a collaboration by focusing on a particular application. The specific problem we wish to address is in

the area of protein structure and analysis of multi-domain proteins (as an example for other type of interactions among large bio-molecules). By hosting this workshop, our aim is not only to stimulate research at the interface between these disciplines, but also to stimulate development of ideas and methods in each field.

Organizers: I. Dubchak (Lawrence Berkeley Nat. Lab., National Energy Res. Scientific Comp. Div.), C. A. Kulikowski (Rutgers Univ.), I. Muchnik (Rutgers Univ., DIMACS), F. Roberts (Rutgers Univ., DIMACS), S. Spengler (Lawrence Berkeley Nat. Lab., Life Sciences Div.), M. D. Zorn (Lawrence Berkeley Nat. Lab., National Energy Res. Scientific Comp. Div.).

Invited Speakers: I. Gelfand (Rutgers Univ.), A. Kister (Rutgers Univ.), A. Shneider (Invention-Machine Co., MA), and M. Zorn (Lawrence Berkeley Nat. Lab.).

Local Arrangements: P. Pravato, DIMACS Center, e-mail: `pravato@dimacs.rutgers.edu`, 732-445-5929.

Information: Contact I. Muchnik, e-mail: `muchnik@dimacs.rutgers.edu`. WWW: `http://dimacs.rutgers.edu/Workshops/CombCluster/`.

28–July 1 A Conference in Probability in Honor of Harry Kesten, Cornell University, Ithaca, New York. (Apr. 1998, p. 532)

28–July 2 Pacific Rim Geometry Conference, Univeristy of British Columbia, Vancouver, British Columbia. (Dec. 1997, p. 1498)

28–July 3 Conference on Computer-Aided Verification (CAV'98), Vancouver, British Columbia. (Jan. 1998, p. 111)

28–July 3 The Third St. Petersburg Workshop on Simulation, St. Petersburg, Russia. (Jan. 1998, p. 112)

* **28–July 3 Summer School on K-Theory and Algebraic Groups**, Grand Hotel Bellavista, Levico Terme (Trento), Italy.

Scientific Organizers: M. Karoubi (Paris VII), C. Pedrini (Genova), and U. Rehmann (Bielefeld).

Sponsor: The European Research Project TMR FM RX - CT 970107 co-sponsors this school.

Topics: There will be 4 main series of lectures in the morning and research talks in the afternoon. Each lecture series will consist of 5 hours of lectures covering the following topics: (1) E. Friedlander: *An introduction to K-theory and its recent developments*; (2) A. Merkurjev: *K-theory and algebraic groups*; (3) M. Kolster: *K-theory of algebraic integers*; (4) B. Kahn: *K-theory and quadratic forms over fields*.

Deadline: Application deadline: May 15, 1998.

Information: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento), Italy; tel: +39-461-881628, fax: +39-461-810629, e-mail: `michelet@science.unitn.it`.

29–July 1 Parallel Computing and Algorithms in Economics and Finance (Call for Papers), University of Cambridge, Cambridge, United Kingdom. (Feb. 1998, p. 293)

29–July 2 The First International Conference on Functional Differential Equations (FDE1), The Research Institute, The College of Judea and Samaria, Ariel, Israel. (Apr. 1998, p. 532)

29–July 2 International Workshop on Orthogonal Polynomials: Numerical and Symbolic Algorithms, Madrid, Spain. (Mar. 1998, p. 423)

29–July 3 Arakelov Theory, Values of L-Functions, Newton Institute, Cambridge, United Kingdom. (Jan. 1998, p. 112)

29–July 3 Second International Conference on Bifurcation Theory and its Numerical Analysis, Xi'an Jiaotong University, Xi'an, P.R. China. (Dec. 1997, p. 1498)

* **29–July 4 International Conference on Representation Theory**, East China Normal University, Shanghai, China.

Sponsors: National Natural Science Foundation of China and Mathematical Center of State Education Commission of China.

Program: To present new research results in the representation theory of finite and infinite dimensional algebras, Lie algebras, algebraic groups, quantum groups, superalgebras, vertex operator algebras, and related applications to other fields of mathematics and physics.

Speakers: H. H. Andersen (Aarhus Univ., Denmark), M. Broué (Paris 7), J. Carlson (Univ. of Georgia), E. Cline (Univ. of Oklahoma), R. Dipper (Univ. of Stuttgart, Germany), S. Donkin (Queen Mary College, London), J. E. Humphreys (Univ. of Massachusetts, Amherst), P. Littelmann (Univ. de Strasbourg, France), G. Lusztig (MIT), G. Mason (UC Santa Cruz), B. Parshall (Univ. of Virginia), A. Premet (Univ. of Manchester), C. M. Ringel (Bielefeld), L. Scott (Univ. of Virginia), T. Tanisaki (Hiroshima Univ., Japan).

Deadline: Application deadline: May 15, 1998.

Information: e-mail: `zlin@math.ksu.edu`, Web: `http://www.math.ksu.edu/~zlin/repconf.html`.

29–July 4 School-Conference on Dynamical Systems: From Crystal to Chaos, Marseille-Luminy, France. (May 1998, p. 637)

July 1998

2–3 European Women in Mathematics Workshop on Moduli Spaces in Mathematics and Physics, Oxford, England. (May 1998, p. 637)

* **3–5 GAMM-Workshop on Iterative Processes for Solving Equations**, Mathematisches Seminar, Christian-Albrechts-University, Kiel, Germany.

Aim: The goal of this symposium is to bring together mathematicians working in all fields of iterative processes with the aim

of approximating the zeros of singles or systems of equations.

Topics: Topics include, but are not restricted to: optimization, control theory, calculus of variation, plasticity, partial differential equations, contact, microstructures.

List of Speakers: O. Axelsson (Nijmegen), M. Dryja (Warsaw), B. Fischer (Luebeck), W. Hackbusch (Kiel), A. Hoffman (Ilmenau), R. Kornhuber (Stuttgart), M. S. Petkovic (Nis), P. Plechac (Oxford), M. Reinders (Hannover), T. Roubicek (Prague), T. Sakurai (Japan), H. Schwetlick (Dresden).

Organizers: C. Carstensen, P. Kosmol, M. S. Petkovic.

Information: All correspondence in connection with the workshop, including registration and submission of abstracts, is to be made via e-mail to: `saf@numerik.uni-kiel.de`. For information on hotel reservations and a registration form, visit the home page at `http://www.numerik.uni-kiel.de/cc/work98.html`.

3–6 International Conference on the Teaching of Mathematics, Village of Pythagorion, Samos, Greece. (Mar. 1998, p. 423)

5–9 1998 New Zealand Mathematics Colloquium, Victoria University of Wellington, New Zealand. (Dec. 1997, p. 1498)

5–10 15th International Conference on Automated Deduction (CADE-15), Lindau, Germany. (Jan. 1998, p. 112)

5–17 DIMACS Workshops: Reconnect Conference: Reconnecting Teaching Faculty to the Mathematical Sciences Enterprise, DIMACS Center, Rutgers University, Piscataway, New Jersey. (Apr. 1998, p. 532)

5–18 NATO Advanced Study Institute on Signal Processing for Multimedia, Il Ciocco Resort Hotel, Tuscany, Italy. (May 1998, p. 638)

6–9 Second International Conference Finite-Difference Methods: Theory and Applications, Minsk, Belarus. (Apr. 1998, p. 532)

6–10 International Conference on Ordered Algebraic Structures and Related Areas (OAS '98), The Center for Chinese and American Studies, Nanjing University, Nanjing, P. R. China. (Jan. 1998, p. 112)

6–10 Systèmes Dynamiques: Du Cristal Au Chaos (to honour the sixtieth birthday of Gérard Rauzy), Marseille-CIRM, France. (May 1998, p. 638)

6–10 Twenty-Third Australasian Conference on Combinatorial Mathematics and Combinatorial Computing, The University of Queensland, Brisbane, Australia. (Sept. 1997, p. 1029)

* **6–11 5th Czech-Slovak International Symposium on Combinatorics, Graph Theory, Algorithms and Applications**, DIMATIA Charles University, Prague, Czech Republic.

Information: Topics cover all aspects of contemporary combinatorics and graph theory from both the theoretical and applied viewpoints. Deadline for registration and abstracts is May 15, 1998. Contact `cs98@kam.ms.mff.cuni.cz`, `http://www.ms.mff.cuni.cz/acad/kam/conferences/c-s98.html`.

6–17 Mathematical Models in Population Biology and Epidemiology: From Elementary to the Frontier, University of Wyoming, Laramie, Wyoming. (Jan. 1998, p. 112)

6–18 IMA Summer Program: Coding and Cryptography, University of Minnesota, Minneapolis, Minnesota. (May 1998, p. 638)

7–9 Thirteenth International Conference on Artificial Intelligence in Engineering (AIENG 98), Galway, Ireland. (Dec. 1997, p. 1498)

7–11 (Note: NEW DATE) **The 1st IMACS Conference on Mathematical Modelling and Computational Methods in Mechanics and Geodynamics Modelling '98**, Prague, Czech Republic. (Oct. 1997, p. 1157)

7–11 Chance Workshop, Dartmouth College, Hanover, New Hampshire. (Mar. 1998, p. 424)

7–17 Emerging Applications of Dynamical Systems, University of Minnesota, Minneapolis, Minnesota. (Sept. 1997, p. 1029)

8–10 4th International Conference on Lattice Paths Combinatorics and Applications, University of Vienna, Vienna, Austria (Dec. 1997, p. 1498)

8–11 IFAC-LSS '98, Symposium on Large Scale Systems: Theory and Applications, Patras, Greece. (Oct. 1997, p. 1158)

9–10 Workshop on New Methods in Applied and Computational Mathematics (NEMACOM'98), Hervey Bay, Queensland, Australia. (Feb. 1998, p. 294)

* **12–15 Ninth SIAM Conference on Discrete Mathematics**, University of Toronto, Toronto, Canada.
Sponsor: SIAM Activity Group on Discrete Mathematics.
Organizer: D. Corneil (Univ. of Toronto, Canada).
Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

12–August 1 IAS/Park City Mathematics Institute, Park City, Utah. (Jan. 1998, p. 113)

* **13–15 4th Conference on Mathematics and Computers in Sport**, Bond University, Queensland, Australia.
Information: N. de Mestre, School of Information Technology, Bond Univ., Gold Coast, Queensland 4229, Australia; e-mail: `neville_de_mestre@bond.edu.au`.

13–16 3rd (Biennial International) Engineering Mathematics and Applications Conference (EMAC'98), Adelaide, Australia. (Apr. 1998, p. 532)

13–17 International Colloquium on Automata, Languages, and Programming (ICALP'98), Aalborg, Denmark. (Jan. 1998, p. 113)

13–17 1998 SIAM Annual Meeting, University of Toronto, Toronto, Ontario, Canada. (Jan. 1998, p. 113)

* **13–18 Workshop on Mathematics Related to Arrangements of Hyperplanes**, Tokyo Metropolitan University, Tokyo, Japan.
Topics: Topics of the workshop, which celebrates the 60th birthyear of Professor Peter Orlik, include various aspects of hyperplane or subspace arrangements themselves, topological properties of the complements of hypersurfaces, hyperplane arrangements as singularities, hypergeometric functions, combinatorial aspects of hyperplane arrangements as matroid realizations, reflection groups, etc.
Featured Speakers: K. Aomoto, C. Athanasiadis, D. Cohen, J. Damon, M. Falk, E. Hironaka, K. Iwasaki, T. Kohno, M. Oka, P. Orlik, R. Randell, B. Sagan, K. Saito, R. Silvotti, R. Stanley, H. Terao, B. Tessier, A. Varchenko, M. Yoshida, S. Yuzvinsky, G. Ziegler.
Organizers: M. Oka (Tokyo Metropolitan Univ.), `oka@math.metro-u.ac.jp`; H. Terao (Hokkaido Univ.), `terao@math.sci.hokudai.ac.jp`.
Program Committee: M. Falk (Northern Arizona Univ.), `michael.falk@nau.edu`; R. Randell (Univ. of Iowa), `randell@math.uiowa.edu`.
Information: `http://megalo.math.metro-u.ac.jp/~hterao/hyparr98.html`.

13–31 The Beijing Workshop on Universal Algebra, Logic and Computer Science, Institute of Software, Beijing, China. (Apr. 1998, p. 533)

15–18 MAA Mathfest 98, Ryerson Polytechnic College, Toronto, Canada. (May 1998, p. 638)

15–22 Mathematical Problems in Semiconductor Physics, Grand Hotel San Michele, Cetraro (Cosenza), Italy. (May 1998, p. 638)

19–24 International Symposium on Optical Science, Engineering, and Instrumentation, Vision Geometry VII (SD91), San Diego, California. (Jan. 1998, p. 113)

19–25 IV International Conference on Non-Associative Algebra and Its Applications, Institute of Mathematics and Statistics, University of Sao Paulo, Sao Paulo, Brazil. (Mar. 1998, p. 424)

19–25 Galois Representations in Arithmetic Geometry, Anogia, Crete, Greece. (May 1998, p. 638)

19–August 2 7th Workshop on Stochastic Analysis, Didim, Turkey. (Sept. 1997, p. 1029)

* **20–22 9th Annual Conference on Combinatorial Pattern Matching**, DIMACS, Rutgers University, Piscataway, New Jersey.
Information: `http://dimacs.rutgers.edu/Workshops/ComPM/index.html`.

* **20–24 The Fourth International Seminar on Average-Case Analysis of Algorithms**, Computer Science Dept., Princeton University, Princeton, New Jersey.
Sponsor: DIMACS Center.
Organizers: P. Flajolet (INRIA), R. Kemp (Johann Wolfgang Goether-Univ.), H. Mahmoud (George Washington Univ.), H. Prodinger (Vienna Univ. of Tech.), R. Sedgewick (Princeton Univ.), and W. Szpankowski (Purdue Univ.).
Focus: This is the fourth in an ongoing series of meetings on the analysis of algorithms, which have been held in Dagstuhl, Germany, in the past and are planned for Barcelona and other locations in the future. The 1998 meeting is intended to attract more researchers from the U.S. to the field of analysis of algorithms. The focus of this workshop is the average-case analysis of algorithms and its relation to the wider areas of analytic combinatorics, exact and limiting distributions, formal techniques, probability theory, combinatorics, and computer science.
Local Arrangements: S. Barbu, Princeton Univ.; `barbu@cs.princeton.edu`; tel: 609-609-1771.
Information: `http://dimacs.rutgers.edu/Workshops/AverageCase/index.html`.

20–August 7 DIMACS Research and Education Institute 1998 Graph Theory and Combinatorial Optimization, DIMACS Center, Rutgers University, Piscataway, New Jersey. (May 1998, p. 638)

* **21–24 Workshop on State of the Art in Finite Element Method—Theory, Algorithm and Applications**, City University of Hong Kong, Hong Kong, Republic of China.
Organizers: B. Guo (Manitoba, Canada, `bguo@newton.amath.umanitoba.ca`) and W. Sun (City Univ., HK, `maweiw@math.cityu.edu.hk`).
Objective: The goal of this workshop is to survey the remarkable progress of the finite element methods in the past half century and the current challenging issues on aspects of analysis, algorithms, applications, and implementations. The workshop is also aimed at getting both mathematicians and engineers to participate in discussing the mathematical and industrial perspective of the finite element method in the twenty-first century.
Participation: Open to mathematicians and engineers working on the finite element methods and their applications. Those wishing to attend and contribute a talk should contact the organizers. Graduate students with interest in numerical analysis and scientific computation are also encouraged to participate. There is no registration fee for the workshop. Please contact W. Sun for accommodations booking.

Invited Lectures: Q. Du (HKUST, Hong Kong), Numerical Methods for the Ginzburg-Landau Equations; R. Falk (Rutgers, USA), Finite Element Approximation of the Reissner-Mindlin Plate Model, and Mixed Formulation for the Plate and Shell; J. Osborn (Maryland, USA), Eigenvalue Problems; L. Qun (Academia Sinica, China), High Accuracy Methods for Finite Elements; M. Wheeler (Austin, USA), Locally Conservative Algorithms for Modeling Fluid Flow: Theory, Implementation, and Application.

Topics: The p and h-p finite element method, discontinuous Galerkin method, eigenvalue problems, mixed formulation, computational mechanics, parallel and iterative solvers, multigrid and domain decomposition method, computational geosciences, partition of unity finite element method, integral equation and boundary element method, A-posteriori error estimation and adaptivity.

Information: `http://www.cityu.edu.hk/ma/hypna.html`.

22–31 Mathematical Modeling in Industry, A Workshop for Graduate Students, University of Minnesota, Minneapolis, Minnesota. (May 1998, p. 639)

23–31 International Centre for Mathematical Sciences: Computation and Geometric Aspects of Modern Algebra, Heriot-Watt University, Edinburgh, Scotland. (Apr. 1998, p. 533)

24–25 Second International Conference on Matrix-Analytic Methods in Stochastic Models, Winnipeg, Manitoba, Canada. (Sept. 1997, p. 1029)

26–31 III Iberoamerican Congress of Mathematics Education (III CIBEM), Universidad Central de Venezuela, Caracas, Venezuela. (Mar. 1998, p. 424)

26–August 1 Front Propagation: Theory and Applications, Anogia, Crete, Greece. (May 1998, p. 639)

26–August 1 XV Escola de Algebra, Canela, Rio Grande do Sul, Brazil. (Feb. 1998, p. 294)

27–31 Calculus Enhanced with Computer-Algebra and Graphing Using the TI-92, Department of Mathematical Sciences, United States Military Academy, West Point, New York. (Apr. 1998, p. 533)

27–August 7 SMS-NATO ASI: Nonlinear Analysis, Differential Equations, and Control, Université de Montreal, Montreal, Canada. (Dec. 1997, p. 1498)

* 28–31 International Conference on Nonlinear Analysis and Convex Analysis, Niigata Washington Hotel, Niigata, Japan.
Organizing Institutions: Niigata Univ., Tokyo Inst. of Technology, Hirosaki Univ.
Conference Chairpersons: W. Takahashi (Chair, T.I.Tech., Japan), T. Tanaka (Co-Chair, Hirosaki Univ., Japan).
Topics: Nonlinear functional analysis, fixed point theory and its applications, convex analysis and set-valued analysis, minimax problems and game problems, optimization and multicriteria problems.

Invited Speakers: C. Castaing (Univ. Montpellier II, France), K. Fan (Univ. Cal. Santa Barbara), H.-C. Lai (I-Shou Univ., Taiwan), A. T. Lau (Univ. Alberta, Canada), W. Oettli (Mannheim Univ., Germany), S. Park (Seoul National Univ., Korea), L. A. Petrosjan (St. Petersburg State Univ., Russia), L. Qi (Univ. New South Wales, Australia), R. T. Rockafellar (Univ. Washington), B. Ricceri (Univ. Catania, Italy), S. Simons (Univ. Cal. Santa Barbara), K. K.Tan (Dalhousie Univ., Canada), K. Tanaka (Niigata Univ., Japan), P. L. Yu (Univ. Kansas), V. I. Zhukovskiy (Orekhovo-Zuevo Pedag. Inst., Russia).

Registration: The early-bird registration fee is 25,000 Yen, and student registration fee is 15,000 Yen prior to June 30; on or after July 1, they are 30,000 and 18,000, respectively. Participants can pay it either by a credit card (VISA, Master Card) or bank transfer to the following account: Bank: The Bank of Tokyo-Mitsubishi, Ltd., Niigata Branch, Account Name: NACA98 Niigata, Account No.: 0522326. The fee covers all the conference materials including welcome reception, banquet, morning and afternoon tea/coffee, and the proceedings.

Information: e-mail: `kiuchi@is.titech.ac.jp` (Dr.Kiuchi of T.I.Tech.); Conference Home Page: `http://math.sc.niigata-u.ac.jp/naca98`.

29–August 7 Frontiers of Combinatorics, Los Alamos National Laboratory, Los Alamos, New Mexico. (Feb. 1998, p. 294)

August 1998

August–December The Fields Institute for Research in Mathematical Sciences Program in Probability and Its Applications, The Fields Institute, Toronto, Ontario, Canada. (Sept. 1997, p. 1029)

2–14 Difference Sets, Sequences and Their Correlation Properties. A NATO Advanced Study Institute, Bad Windsheim, Germany. (Apr. 1998, p. 533)

3–7 Art and Mathematics Conference (AM98), University of California at Berkeley, Berkeley, California. (Mar. 1998, p.425)

3–7 Conference on Lattices and Universal Algebra, JATE Bolyai Institute, Szeged, Hungary. (Oct. 1997, p. 1158)

3–7 XI - Brazilian Meeting of Topology, Departamento de Matematica do Instituto de Geociencias e Ciencias Exatas da UNESP - Rio Claro, Sao Paulo, Brazil. (Dec. 1997, p. 1499)

* 3–8 (NOTE: NEW DATE) Exactly Solvable Models in Mathematical Physics, Chelyabinsk University of Technology, Chelyabinsk, Russia
Workshop Topics: Multidimensional integrability, tetrahedron equation, functional tetrahedron equation and quantization of its solutions, connection with quantum strings; low-dimensional integrability.

Sponsors: South Ural State Univ., Russian Foundation for Basic Research, and the Institute for Mathematics and Mechanics (Ekaterinburg, Russia).
Proceedings: The proceedings of the conference will be published in "Theoretical and Mathematical Physics". This is a journal of Russian Academy of Sciences published in both English and Russian. The proceedings volume may contain up to 192 pages.
Information: Contact I. G. Korepanov, Dept. of Algebra and Geometry, South Ural State Univ., 76 Lenin Ave., Chelyabinsk 454080, Russia; e-mail: `igor@prima.tu-chel.ac.ru`; Web page: `http://at.yorku.ca/c/a/a/w/01.htm`.

3–21 Mathematical Geophysics Summer School, Department of Mathematics, Stanford University, Stanford, California. (Mar. 1998, p. 425)

4–15 Summer School on Low Dimensional Topology, Budapest, Hungary. (Mar. 1998, p. 425)

6–10 Stokes Summer School, County Sligo, Skreen, Ireland. (May 1997, p. 639)

7–10 European Summer School: Markov Chain Monte Carlo Methods, Rebild, Denmark. (Feb. 1998, p. 294)

9–11 Fifth International Symposium on Solving Irregularly Structured Problems in Parallel (IRREGULAR'98), NERSC, Lawrence Berkeley National Laboratory, Berkeley, California. (May 1998, p. 639)

9–11 The Fourth International IMACS Conference on Applications of Computer Algebra, Czech Technical University, Prague, Czech Republic. (Mar. 1998, p. 425)

9–15 Conference on Geometry and Topology, University of Aarhus, Aarhus, Denmark. (Dec. 1997, p. 1499)

9–16 The 1998 ASL European Summer Meeting (Logic Colloquium '98), Prague, Czech Republic. (May 1998, p. 639)

10–12 Conference on Combinatorics and Physics, Los Alamos National Laboratory, Los Alamos, New Mexico. (May 1998, p. 639)

10–13 Integral Methods in Science and Engineering '98, Michigan Technological University, Houghton, Michigan. (Dec. 1997, p. 1499)

* 10–13 The Fifth International Conference on Integral Methods in Science and Engineering (IMSE98), Houghton, Michigan.
Invited Speakers: G. Beylkin (Univ. of Colorado), A. G. Gibson (Univ. of New Mexico), G. R. Ierley (Scripps Inst.), S. Kim (Univ. of Wisconsin), M. Z. Nashed (Univ. of Delaware), J. C. Nedelec (Ecole Polytechnique), B. D. Sleeman (Univ. of Leeds).
Topics: Analytic and numerical methods, hybrid approaches, ordinary and partial differential equations, population dynamics, boundary element methods, image and signal processing, wavelets and multi-resolution analysis, rheology, quantum mechanical physics, integral equations, finite

element methods, vortex methods, computational fluid dynamics, and inverse problems.

Grants: NSF/DMS has provided registration/travel grants for graduate students and junior researchers.

Deadlines: Registration: May 31, 1998; Fee: US $150; Abstract deadline: April 30, 1998.

Information: `http://www.math.mtu.edu/~imse/;` or contact B. Bertram, IMSE98, Math, Michigan Technological University, 1400 Townsend Dr., Houghton, MI 49931-1295; tel: 906-487-2211; fax: 906-487-3133; e-mail: `imse@mtu.edu`.

10–14 From Individuals to Populations, Ceske Budejovice, Czech Republic. (Sept. 1997, p. 1030)

10–14 7th International Conference "Differential Geometry and Applications", Satellite Conference of ICM in Berlin, Masaryk University, Brno, Czech Republic. (May 1998, p. 639)

* **10–14 Representations of finite groups and combinatorics**, Otto-von-Guericke University Magdeburg, Magdeburg, Germany.
Focus: This is a satellite conference to the ICM98 - International Congress of Mathematicians Berlin 1998 - taking place in Magdeburg, located about 150 km west of Berlin; it focuses on those areas of representation theory of finite groups which have strong connections with combinatorics, the related combinatorics of partitions and tableaux, the theory of symmetric functions, and related areas.
Organizers: C. Bessenrodt (Magdeburg), A. O. Morris (Aberystwyth), J. B. Olsson (Copenhagen).
Scientific Committee: C. Bessenrodt. K. Erdmann, P. Hanlon, G. D. James, A. O. Morris, J. B. Olsson and R. Stanley.
Principal Speakers (as of April 1998): S. Donkin (London), K. Erdmann (Oxford), A. Garsia (San Diego), M. Geck (Paris), P. Hanlon (Ann Arbor), G. James (London), A. Kleshchev (Eugene), P. Littelmann (Strasbourg), G. Malle (Heidelberg), A. Ram (Princeton), B. Srinivasan (Chicago), R. Stanley (Boston).
Additional Talks: In addition to the one-hour lectures by the principal speakers it is planned to have further talks by the participants on the following topics: Representation theory of symmetric and related groups; Representations of finite groups of Lie type; Representations of Hecke algebras and q-Schur algebras; Combinatorics of partitions and tableaux; New combinatorial concepts for studying representations; Symmetric functions; Relations to other areas, such as invariant theory and physics.
Registration: Deadline: May 31, 1998.
Information: ICM Satellite Conference, Institut für Algebra und Geometrie, Fakultdt für Mathematik, Otto-von-Guericke-Univ. Magdeburg D-39016 Magdeburg, Germany; e-mail: `icmsat98@uni-magdeburg.de`; conference Web site: `http://www.math.ku.dk/~olsson/announc.htm`.

10–17 The 4th International Conference on Theory of Groups (GROUP-KOREA 1998), Pusan National University, Pusan, Korea. (Feb. 1998, p. 294)

12–16 Georgia Topology Conference, University of Georgia, Athens, Georgia. (May 1998, p. 639)

13–15 International Symposium on Symbolic and Algebraic Computation (ISSAC'98 Rostock), Universität Rostock, Rostock, Germany. (Mar. 1998, p. 425)

13–16 Conference on Commutative Algebra in Honour of David Rees's 80th Year (a satellite conference of ICM-98), Exeter, United Kingdom. (Mar. 1998, p. 425)

13–17 Seventh International Colloquium on Numerical Analysis and Computer Science with Applications, Plovdiv, Bulgaria. (Sept. 1997, p. 1030)

15–23 International Workshop on Nonlinear and Improperly Posed Problems, Kocaeli, Turkey. (Feb. 1998, p. 294)

16–21 1998 IEEE International Symposium on Information Theory, Massachusetts Institute of Technology, Cambridge, Massachusetts. (Sept. 1997, p. 1030)

17–26 Introductory Workshop in Foundations of Computational Mathematics and Symbolic Computation in Geometry and Analysis, Mathematical Sciences Research Institute, Berkeley, California. (May 1998, p. 640)

17–September 2 XXVIIIth Probability Summer School, Saint-Flour, Cantal, France. (Mar. 1998, p. 425)

18–23 Ninth International Colloquium on Differential Equations, Plovdiv, Bulgaria. (Sept. 1997, p. 1030)

18–27 International Congress of Mathematicians (ICM98), Berlin, Germany. (June 1996, p. 702)

19–21 20th Anniversary of Boundary Elements Conference (BEM 20), University of Central Florida, Orlando, Florida. (Dec. 1997, p. 1499)

19–23 4th International Conference on Numerical Methods and Applications, Sofia, Bulgaria. (Dec. 1997, p. 1499)

* **19–23 The Second Palestinian International Conference on Mathematics**, Birzeit University, Birzeit, Palestine.
Organizers: The Palestinian Society for Mathematical Sciences and the Department of Mathematics at Birzeit University are organizing the Second Palestinian International Conference on Mathematics at Birzeit University, which is located about 20 miles north of Jerusalem.
Topics: Applied mathematics, pure mathematics, statistics, mathematics education, and curriculum developments.
Organizing Committee: In Palestine: A. Abdulmohsen, F. M. Allan (chairman), M. El Amleh, A. Elayyan, T. Mughrabi, M. Saleh, M. Shabat, S. Yaseen, and H. Yousef. In

the United States: S. Elaydi, A. Elkhader, M. Ismail, Z. Nashed.
Scientific Committee: T. Abu Kaf, M. Awartani, S. Elaydi (chairman), A. Elkhader, M. Hamdan, M. Ismail, and Z. Nashed.
Call for Papers: A person wishing to present a paper in the conference may submit an abstract along with a registration form to the organizing committee no later than June 1, 1998.
Information: F. Allan, Department of Mathematics and Computer Science, Birzeit Univ., Box 14, Birzeit, Palestine, via Israel; e-mail: `fathi@math.birzeit.edu`; S. Elaydi, Department of Mathematics, Trinity Univ., San Antonio, TX 78212; e-mail: `selaydi@trinity.edu`.

24–29 Fields Institute Workshop on Mathematical Physics of Polymers and Percolation, The Fields Institute for Research in Mathematical Sciences, Toronto, Ontario, Canada. (Feb. 1998, p. 294)

24–September 1 Filtration in Porous Media and Industrial Applications, Grand Hotel San Michele, Cetraro, Italy. (May 1998, p. 640)

24–September 1 Stochastic PDEs and Kolmogorov Equations in Infinite Dimensions, Grand Hotel San Michele, Cetraro, Italy. (May 1998, p. 640)

26–28 Randomized Algorithms, a Satellite Workshop to MFCS'98, Brno, Czech Republic. (May 1998, p. 640)

* **27–31 Discrete Groups and Conformal Geometry**, Malardalen University, Vasteras, Sweden.
Organizers: B. Baumslag (Malardalen Univ.), G. Bergqvist (Malardalen Univ.), and M. Izquierdo (Malardalen Univ.).
Deadline: For registration: June 1, 1998.
Information: `http://www.ima.mdh.se/geometry/`.

27–31 ICDEA98 Fourth International Conference on Difference Equations and Applications, Institute of Mathematics, Poznan University of Technology, Poland. (Mar. 1998, p. 426)

* **28–September 2 Convex and Discrete Geometry**, Instytut Matematyki i Fizyki ATR, Bydgoszcz, Poland.
Organizer: M. Lassak, e-mail: `lassak@atr.bydgoszcz.pl`.
Honorary Committee: P. M. Gruber (Vienna), P. McMullen (London), J. Pach (New York), A. Pełczyński (Warsaw), R. Schneider (Freiburg) G. F. Tóth (Budapest), J. M. Wills (Siegen), V. A. Zalgaller (St. Petersburg).
Invited Speakers: K. Bezdek (Budapest), J. Bokowski (Darmstadt), W. Kuperberg (Auburn), E. Schulte (Boston). It is likely that one or two additional lecturers will be invited.
Abstracts and Talks: Before August 1, 1998, please send camera-ready abstracts for making Xerox copies. Every abstract should be on an A4-size page with all the margins being 4 cm. Under the title printed

in capital letters please write the author(s)' name(s). The text should be double spaced. You can also send a TₑX file of your abstract by e-mail. A booklet with the abstracts will be given to the participants at the beginning of the conference. An overhead projector and a large blackboard will be available during the participants' 20-minute talks.

Fees: The total fee is $175. It includes registration, full board (including a single room in a hostel) from the afternoon of August 27 (Thur.) to the morning of September 3 (Thur.), and two excursions (on Sun., August 30, and on Wed., September 2).

Information: Correspondence concerning the conference should be sent to M. Lassak, Instytut Matematyki i Fizyki ATR, Kaliskiego 7, 85–791 Bydgoszcz, Poland; e-mail: `lassak@atr.bydgoszcz.pl`; tel: (48) (52) 3408646, or 3433990 in evenings; fax: 48-52-3408063.

28–September 3 Fractal Geometry and Stochastics II, Univ of Greifswald, Greifswald, Germany. (Mar. 1998, p. 426)

28–September 3 Function Spaces V, Poznan, Poland. (Apr. 1998, p. 533)

30–September 4 XII Conference on Analytic Functions, Lublin, Poland. (Mar. 1998, p. 426)

30–September 5 Algebraic Number Theory and Diophantine Analysis, Graz, Austria. (Sept. 1997, p. 1030)

31–September 4 Conference on Functional Analysis, Partial Differential Equations and Applications, in honor of V. Mazya, Rostock, Germany. (Dec. 1997, p. 1500)

31–September 5 An International Conference on Representation Theory of Algebras, University of Bielefeld, Bielefeld, Germany. (Apr. 1998, p. 533)

31–September 6 International Conference on Mathematics and Applications Dedicated to the 90th Anniversary of L. S. Pontryagin, Steklov Mathematical Institute and Moscow State (Lomonosov) University, Moscow, Russia. (Sept. 1997, p. 1030)

31–September 18 Workshop on Dynamical Systems, Trieste, Italy. (Apr. 1998, p. 534)

September 1998

1–9 Fourth International Workshop on Complex Structures and Vector Fields, St. Constantine resort (near Varna), Bulgaria. (Sept. 1997, p. 1031)

* **1–10 Advanced Course on Dynamical Systems**, Centre de Recerca Matematica, Bellaterra, Spain.
Speakers: R. Devaney (Boston Univ.): Dynamics and topology of entire functions; A. van den Essen (Univ. of Nijmegen): The Jacobian conjecture and dynamical systems; S. van Strien (Univ. of Warwick): Complex dynamics of real polynomials.

Information: Centre de Recerca Matemàtica (IEC), Apartat 50, 08193 Bellaterra, Spain; e-mail: `crm@crm.es`.

2–5 1998 Conference on Computational Physics (CCP 1998), Granada, Spain. (Feb. 1998, p. 295)

* **3–4 Mathematical and Computational Issues in Pattern Formation**, University of Minnesota, Minneapolis, Minnesota.
Speakers: P. Maini, J. Murray, and H. Othmer.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, Web page: `http://www.ima.umn.edu/biology/`.

* **6–18 A NATO Advanced Study Institute; Genes, Fossils and Behaviour: An Integrated Approach to Human Evolution**, University of Cambridge, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.
Aim: While the basic pattern of hominid evolution is well documented, the recent evolutionary history of homo sapiens is less clear. Application of molecular genetics techniques has great potential for resolving issues over this period, but as the complexity of such data increases, the quantitative methods used for its analysis become more important. This phase is also one of the richest for biological and behavioral evidence derived from both fossils and archaeology. The ASI aims to bring together experts from these diverse areas and through survey and research lectures to inform participants of the latest developments in the field, covering data and its interpretation and experimental and analytical techniques. The program will be aimed at research scientists at postdoctoral level and beyond, though it will also be accessible to advanced graduate students.
Organizing Committee: P. Donnelly (Oxford, director), R. Foley (Cambridge), S. Pääbo (Munich), A. Rogers (Utah).
Invited Speakers: G. Barbujani (Ferrara), J. Bertranpetit (Barcelona), R. Dunbar (Liverpool), R. Griffiths (Monash), J.-J. Hublin (Paris), L. Jorde (Utah), M. Lahr (Sao Paulo), M. Stoneking (Penn State), Y. Takahata (Kanagawa), R. Ward (Oxford).
Applications: To participate in the NATO ASI, please complete and return an application form, and for students and postdoctoral fellows arrange for a letter of reference from a senior scientist. Limited financial support is available for participants from appropriate countries, and the usual guidelines for the NATO ASI series will be followed in the selection of participants.
Location and Costs: The workshop will take place at the Isaac Newton Institute and accommodations for participants will be provided at Wolfson Court, adjacent to the Institute. The conference package costs £600 for academics and £1,000 for others, which includes accommodations from

September 6–18, together with breakfast and evening meals, plus lunch and refreshments during the days that lectures take place.
Information: Application forms are available from the WWW at `http://www.newton.cam.ac.uk/programs/bfg.html`. Completed forms and letters of recommendation should be sent to H. Hughes, Univ. of Cambridge, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Rd., Cambridge, CB3 0EH, UK; tel: (01223)335999; fax: (01223)330508; e-mail: `h.hughes@newton.cam.ac.uk`. Closing date for receipt of applications and letters of recommendation is **April 30, 1998**.

7–10 Undergraduate Mathematics Teaching Conference (UMTC98), Sheffield Hallam University, Sheffield, England. (May 1998, p. 640)

7–11 A Euroconference on Infinite Length Modules, University of Bielefeld, Bielefeld, Germany. (Apr. 1998, p. 534)

* **7–12 International Conference on Partial Differential Equations and Related Topics**, Mission Beach, Queensland, Australia.
Themes: Nonlinear elliptic and parabolic problems, variational problems, geometric analysis, nonlinear waves.
Invited Speakers: K. -S. Chou (Chinese Univ. of Hong Kong), O. Costin (M.S.R.I), P. Deift (Courant Inst.), B. Fuchssteiner (Paderborn), N. Fusco (Florence), M. Giaquinta (Pisa), B. Gulliver (Minnesota), G. Huisken (Tuebingen), H. Ishii (Tokyo), N. Ivochkina (St. Petersburg), H. Jiaxing (Fudan), C. H. Jun (Korea Advanced Inst. of Science and Technology), B. Kawohl (Cologne), Y. Li (Rutgers), C. S. Lin (National Chung Cheng Univ., Taiwan), T.-P. Liu (Stanford), M. Safonov (Minnesota), C. Sbordone (Naples), M. Struwe (ETH), G. Tian (MIT), J. Toland (Bath).
Information: PDE98 Conference, Centre for Mathematics and Its Applications, School of Mathematical Sciences, Australian National Univ., Canberra A.C.T. 0200, Australia; fax: 61-2-62495549; e-mail: `pde98@maths.anu.edu.au`; see Web page: `http://wwwmaths.anu.edu.au/~pde98/`.

* **7–14 Voronoi Conference on Analytic Number Theory and Space Tilings**, Kyiv, Ukraine
Aim: The conference is in honor of Ukrainian mathematician G. Voronoi (1868-1908).
Topics: Analytic number theory, algebraic number theory, Voronoi method of summability, probabilistic models for Voronoi tessellations, space tilings, applications of Voronoi domains in natural sciences.
Information: H. Syta, Voronoi Conference, Inst. of Mathematics Nat. Acad. Sci. Ukraine, 252601 Kyiv-4, Tereshchenkivska str., 3, Ukraine; e-mail: `syta@imath.kiev.ua`.

* **8–12 Pattern Formation and Morphogenesis: The Basic Process**, University of Minnesota, Minneapolis, Minnesota.

Organizers: P. Maini, J. Murray, and H. Othmer.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.edu` or Web page: `http://www.ima.umn.edu/biology/`.

12–13 **Central Sectional Meeting**, DePaul University, Chicago, IL. (Sept. 1997, p. 1031)

*12–14 **Symplectic Geometry and Micro-Local Analysis in honor of Victor Guillemin's 60th Birthday**, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Speakers: R. Bott (Harvard Univ.), L. Boutet de Monvel (Univ. Pierre et Marie Curie), Y. Colin de Verdiere (Inst. Fourier), J. J. Duistermaat (Univ. of Utrecht), Y. Eliashberg (Stanford Univ.), B. Kostant (MIT), I. Singer (MIT), M. Vergne (Univ. de Paris), A. Weinstein (Univ. of California, Berkeley).

Organizers: A. Cannas da Silva, R. Melrose, E. Meinrenken, J. Weitsman.

Information: `http://www-math.mit.edu/~woodward/victor.html`.

*14–18 **International Congress on Numerical Methods for Partial Differential Equations**, Marrakech, Morocco.

Topics: Finite difference methods, finite element methods, spectral methods, multigrids and domain decomposition methods, multilevel methods, nonlinear Galerkin methods and inertial manifolds, solution of systems of linear and nonlinear equations, preconditioning techniques.

Invited Speakers: O. Axelsson (The Netherlands), T. F. Chan (USA), M. Pierre (France), O. Widlund (USA), H. Yserentant (Germany).

Organizing Committee: C. Brezinski (Univ. des Sci. et Techn. de Lille, France), H. El Alaoui (Fac. des Sci. Semlalia, Marrakech, Morocco), A. Hilali (Inst. Nat. des Postes et Telecom., Rabat, Morocco), A. Lembarki (Fac. des Sci. Semlalia, Marrakech, Morocco), A. Messaoudi (École Normale Sup., Rabat, Morocco), H. Sadok (Univ. du Littoral, Calais, France).

Information: ICNMPDE, Laboratoire de Mathematiques Appliquees, Universite du Littoral, Centre Universtaire de la Mi-voix, Batiment H. Poincare, 50 rue F. Buisson, BP 699, 62228 Calais cedex, France; e-mail: `marrak@lma.univ-littoral.fr`; phone: +33-3-21-46-36-56; fax: +33-3-21-46-36-61; WWW pages: `http://www-lma.univ-littoral.fr`.

*14–18 **Pattern Formation and Morphogenesis: Model Systems**, University of Minnesota, Minneapolis, Minnesota.

Organizers: P. Maini, J. Murray, H. Othmer, and L. Segel.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

*14–18 **Solving Systems of Equations**, Mathematical Sciences Research Institute, Berkeley, California.

Focus: As part of its two fall 1998 programs on Foundations of Computational Mathematics and Symbolic Computation, MSRI will host a weeklong workshop on Solving Systems of Equations.

Organizers: J.-P. Dedieu, M.-F. Roy, M. Shub, and B. Sturmfels.

Invited Speakers: The following lectures are invited for the mornings: D. Bini (Univ. of Pisa, Italy), Numerical approximation of polynomial roots; W. Decker (Univ. des Saarlandes, Germany), Primary decomposition: The state of the art; J.-C. Faugere (CNRS, Univ. of Paris VI, France), New generations of Gröbner basis algorithms; L. Gonzalez-Vega (Univ. of Santander, Spain), Polynomial systems in industry: Some concrete examples; T. Y. Li (Michigan State Univ.), Polyhedral homotopies; J.-P. Merlet (INRIA, Nice, France), Applications to mechanism theory, molecular chemistry and signal processing; L. M. Pardo (Univ. of Santander, Spain), Symbolic solving: Getting closer to the barrier; S. Smale (City Univ. of Hong Kong, China), Some aspects of complexity for equation solving; F. Sottile (Univ. of Toronto, Canada), Schubert calculus and control theory; M. Todd (Cornell Univ.), Designing efficient homotopy algorithms using Riemannian geometry. The program will include other lectures and software demonstrations during the afternoons.

Financial Support: A limited amount of funding is available for partial support of people wishing to attend. Students, recent Ph.D.s, women, and minorities are particularly encouraged to apply. To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by June 19, 1998.

Information: Communications about this workshop should be sent either by e-mail to `solvsys@msri.org` or by regular mail to: Solving Systems of Equations, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.msri.org/activities/programs/9899/solvsys/`.

14–19 **6th International Conference on Evolution Equations and Their Applications in Physical and Life Sciences**, Bad Herrenalb, Germany. (May 1998, p. 641)

14–December 18 **Mathematical Questions in Signal and Image Processing**, Institut Henri Poincaré, Paris, France. (May 1998, p. 641)

*15–December 15 **Semester on Dynamical Systems**, Centre de Recerca Matematica, Barcelona, Spain.

Organizers: L. Alsedà, A. Gasull, J. Llibre.

Invited Speakers: B. Branner (The Technical Univ. of Denmark), L. Cherkas (Belarusian State Univ.), H. Giacomini (Université de Tours), J. Guaschi (Université Toulouse III), E. Lacomba (Universidad Autónoma Metropolitana, México), L. Chengzhi (Beijing Univ.), L. Wei-gu (Beijing Univ.), J. Los (Univesité de Nice-Sophia Antipolis), E. Pérez-Chavela (Universidad Autónoma Metropolitana, México), C. L. Petersen (Roskilde Univ.), J. A. Rodríguez (Universidad de Oviedo), Z. Zhifen (Beijing Univ.).

Information: Centre de Recerca Matemàtica (IEC), Apartat 50, 08193 Bellaterra, Spain; e-mail: `crm@crm.es`.

16–18 **Seventh International Conference on Hydraulic Engineering Software (HYDROSOFT 98)**, Centro di in Como, Italy. (Dec. 1997, p. 1500)

17–20 **The Third Annual Conference on Research in Undergraduate Mathematics Education**, Century Center, South Bend, Indiana. (Feb. 1998, p. 295)

17–29 **Ninth Crimean Autumn Mathematical Symposium on Spectral and Evolutionary Problems**, Crimea, Ukraine. (Mar. 1998, p. 426)

*20–25 **Real Analytic and Algebraic Geometry**, Grand Hotel Bellavista, Levico Terme (Trento), Italy.

Scientific Organizers: F. Acquistapace (Pisa), F. Broglia (Pisa), and M. Coste (Rennes).

Speakers (tent.): S. Karlamov (Strasbourg), M. A. Marshall (Saskatoon), C. Scheiderer (Regensburg), M. Shiota (Nagoya), A. Tognoli (Trento).

Deadline: Application deadline: July 31, 1998.

Information: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento), Italy; tel: +39-461-881628, fax: +39-461-810629, e-mail: `michelet@science.unitn.it`.

*22–26 **Eighth Meeting on Real Analysis and Measure Theory**, Hotel Panorama, Maiori (Naples), Italy.

Focus: Since 1984 the meeting on Real Analysis and Measure Theory has been a biennal event of European relevance where established scientists and young researchers discuss their recent work in fundamental mathematical disciplines such as measure theory, stochastic processes, differential equations, functional analysis, real analysis, lattice theory, and game theory, taking into consideration their role in applications to decision theory, engineering, economics, mathematical finance, risk theory, statistics, and theoretical physics. The meeting is also an occasion for discussing new developments, unexpected relations with other mathematical fields, and new connections with applications. With a program of scientific talks of reasonable density, we wish to fix the state of the art in the topics the meeting covers and, simultaneously, to give young scientists a concrete occasion to start/test their research in cooperation with world-famous specialists.

Call for Papers: Any participant is invited to submit a paper concerning its oral communication (if any). After a standard referee process the article will be published in the Italian mathematical journal *Atti Seminario Matematico Fisico Università di Modena*. All papers appearing in this way will also be collected in a unique volume of proceedings which will be distributed to all participants.

Scientific Committee: V. Aversa (Univ. of Naples), A. Basile (Univ. of Naples), B. Bongiorno (Univ. of Palermo), M. Boni (Univ. of Modena), D. Candeloro (Univ. of Perugia), P. de Lucia (Univ. of Naples), E. De Pascale (Univ. of Calabria), G. Santagati (Univ. of Catania), H. Weber (Univ. of Udine), A. Volcic (Univ. of Trieste).

Organizing Committee: V. Aversa, A. Basile, P. de Lucia.

Information: More detailed information (about hotel, deadlines, registration form, fee, and such) will be given in March. For any request, please contact `delucia@matna3. dma.unina.it`.

24–26 4th Hellenic European Conference on Computer Mathematics and Its Applications (HERCMA '98), Athens, Greece. (Oct. 1997, p. 1158)

* **25–26 Developments of Mathematics at the Eve of the Year 2000**, Luxembourg.
Organizer: Luxembourg Mathematical Society.
Speakers: J.-P. Bourguignon (IHES), C. Houzel (Univ. Paris VII), V. Kac (MIT, Boston), J.-P. Kahane (Univ. Paris-Orsay), J. Mawhin (Univ. Catholique Louvain), N. Nikolskii (Univ. Bordeaux I), R. Penrose (Oxford Univ.), J.-P. Pier (Centre Univ. Luxembourg), R. Remmert (Univ. Münster).
Information: Séminaire de Mathématique, Centre Univ. de Luxembourg, 162a Avenue de la Faïencerie, L-1511 Luxembourg; tel: (352) 46.66.44.236; fax: (352) 46.66.44.237; e-mail: `pier@cu.lu`.

26–28 Interdisciplinary Conference on Waves and Continuation Methods in Biology, University of Pittsburgh, Pennsylvania. (Apr. 1998, p. 534)

28–30 International Conference on Ordinal and Symbolic Data Analysis (OSDA98), University of Massachusetts, Lincoln Campus Center, Amherst, Massachusetts. (Dec. 1997, p. 1500)

28–October 4 International Conference "Dynamical Systems: Stability, Control, Optimization (DSSCO'98)", Minsk, Belarus. (Oct. 1997, p. 1158)

October 1998

2–4 Midwest Conference on the History of Mathematics (with a special session on History of Logic), Iowa State University, Ames, Iowa. (Feb. 1998, p. 295)

* **2–3 Twenty-sixth Annual Mathematics and Statistics Conference**, Miami University, Oxford, Ohio.

Program: Mathematics classroom demonstrations.
Principal Speakers: T. Banchoff (Brown Univ.), P. Casazza (Univ. of Missouri), F. Morgan (Williams Coll.).
Call for Papers: Abstracts for 20-minute contributed papers should be sent to M. A. Smith, Dept. of Math. and Stat., Miami Univ., Oxford, OH 45056, voice: (513) 529-5818; fax: (513) 529-1493; e-mail: `smithma@ muohio.edu`; Website: `http://miavx1. muohio.edu/~mstwis/events.html`.
Information: Conference programs with information concerning preregistration and housing will be available after August 1, 1998, from the address above.

* **4–10 Clifford Analysis and Its Applications**, Cetraro, Calabria, Italy.
Topics: Topics of the conference include, but are not limited to, the following: function theory of Dirac operators over euclidean space and Riemannian manifolds, and several complex variables, their associated Hardy spaces and conformal group structures; applications to singular integral operator theory over non-smooth surfaces, and boundary value problems; function theory over several quaternionic and Clifford variables, and applications in quantum mechanics.
Invited Speakers: C. Baer, T. Branson, J. Gilbert, J. Lakey, M. Mitrea, V. Palamadov, T. Qian, N. Salinas, P. van Lancker, Z. Wu.
Contributed Talks: The organizers are soliciting contributed talks of 20 minutes' duration within the topics of the conference. Abstracts should be sent by May 20, 1998, to one of the members of the organizing committee.
Organizing Committee: J. Ryan (Univ. of Arkansas, e-mail: `jryan@comp.uark.edu`), V. Soucek (Charles Univ., Czech Republic, e-mail: `soucek@karlin.mff.cuni.cz`), and D. Struppa (George Mason Univ., e-mail: `dstruppa@osf1.gmu.edu`).

* **5–7 Codes and Trees: Algorithmic and Information Theoretic Approaches**, DIMACS Center, Rutgers University, Piscataway, New Jersey.
Organizers: J. Abrahams (Rutgers Univ., DIMACS), M. Golin (Hong Kong Univ., Comp. Sci. Dept.).
Focus: We see considerable overlap in research interests between information theory and algorithm design in the area of coding problems for data compression, with particular focus on lossless tree structured codes such as Huffmann codes and its variants. Unfortunately, there is not as much overlap in our perspectives. Information theorists are more concerned with entropy-based performance bounds and tradeoffs with respect to additional criteria of interest in the context of data compression systems, e.g., synchronization or buffer management. Computer scientists are more concerned with questions of efficiency and algorithm design. These very different perspectives on similar problems has led to

a lack of communication, occasionally resulting in situations in which problems considered difficult by one community are actually solvable using tools well developed and understood by the other. This workshop will be on codes and trees discussing both the algorithmic and information theoretic approaches. (This workshop is related to DIMACS Special Year on Massive Data Sets.)
Contact: M. Golin, `golin@cs.ust.uk`.
Local Arrangements: P. Pravato, DIMACS Center, `pravato@dimacs.rutgers.edu`, 732-445-5929.
Information: WWW: `http://dimacs. rutgers.edu/Workshops/index.html`.

5–10 Fields Institute Workshop on Hydrodynamic Limits, The Fields Institute for Research in Mathematical Sciences, Toronto, Ontario, Canada. (Feb. 1998, p. 295)

* **5–10 Optimal Regularity in Elliptic, Hypoelliptic, and Parabolic Problems**, Grand Hotel Bellavista, Levico Terme (Trento), Italy.
Scientific Organizer: A. Lunardi (Parma).
Sponsor: The meeting is also sponsored by G.N.A.F.A.-C.N.R.
Speakers (tent.): P. Acquistapace (Pisa), W. Arendt (Ulm), P. Auscher (Amiens), M. Biroli (Milano), P. Cannarsa (Roma II), S. Cerrai (Firenze), P. Clement (Delft), A. Cutri (Roma II), G. Da Prato (Pisa), E. Di Benedetto (Evanston), J. Escher (Kassel), A. Favini (Bologna), M. G. Garroni (Roma I), U. Gianazza (Pavia), P. Guidotti (CalTech), M. Hieber (Karlsruhe), R. Labbas (Le Havre), E. Lanconelli (Bologna), G. M. Lieberman (Ames), S. Lototsky (Cambridge), A. G. R. Macintosh (Macquarie), S. Maier (Zürich), A. Maugeri (Catania), S. Monniaux (Ulm), A. Parmeggiani (Bologna), S. Polidoro (Bologna), J. Prüss (Halle), S. Romanelli (Bari), G. Simonett (Nashville), N. S. Trudinger (Canberra), V. Vespri (Firenze).
Deadline: Application deadline: July 31, 1998.
Information: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento), Italy; tel: +39-461-881628, fax: +39-461-810629, e-mail: `michelet@science.unitn.it`.

7–11 International Conference on Operator Theory and Its Applications to Scientific and Industrial Problems, Winnipeg, Canada. (May 1998, p. 641)

* **8–9 Immunology, Cell Signaling, the Physiology of the Immune System and the Dynamics of the Immune Response**, University of Minnesota, Minneapolis, Minnesota.
Speakers: B. Goldstein, A. Perelson.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@imu.umn.edu`, or Web page: `http://www.imu.umn.edu/ biology/`.

8–9 Third International Conference on Mathematical Modelling and Analysis (MMA-98), Institute of Mathematics, Riga, Latvia. (May 1998, p. 641)

* **8–10 23rd Meeting of the Euro Working Group on Financial Modelling**, Cracow, Poland.

Contributed Papers: According to the general rules of the EURO Working Group on Financial Modelling, participants who wish to present a paper should send an abstract (100–150 words) by July 1, 1998, specifying if they wish to present it in a refereed or unrefereed session. Papers from all areas of financial modelling are solicited, including the following: pricing of derivative securities, time series analysis and forecasting, capital and currency market models, portfolio management and optimization, financial and bank risk management, enterprise modelling, multicriteria decision making in finance, other applications of mathematical modelling in finance and economy. Abstracts should be sent preferably by e-mail in LaTeX format or in Winword6 format as attachment. Participants will be notified of acceptance of their paper by August 1, 1998. Those who wish to present a paper in a refereed session should send a copy of the paper to the organizers by August 20, 1998. Authors should make a copy of their complete papers available to other participants by choosing one of the following two routes: Send 20 copies to A. M. J. Skulimowski at the address below to arrive by October 1, 1998; directly bring 80 copies to the meeting for on-spot distribution. The time for each presentation will be approximately 20 minutes with additional 5–10 minutes for discussion. The conference room is equipped with an overhead projector. Should you have any special further requirement, please let us know when sending your abstract.

Fee: The registration fee for the meeting is US$300 if paid by September 1, 1998, and US$350 afterwards.

Organizing and Program Committee: (tentative) J. A. Dzieza, I. Kaliszewski, A. M. J. Skulimowski (chairman), T. Trzaskalik.

Hotel Accommodations: The organizers reserved 30 rooms at the student hostel at the conference site, which can be used as twin or single rooms. All rooms are equipped with a toilet and a bath or shower. The price will be approximately US$30 per day for a place in a twin room, and US$40 for a single occupancy. Rooms must be booked for the full period of the conference, i.e., from October 7 to October 10 (three nights). An additional night can be booked for the same price. Due to the limited number of rooms in the student hostel, an early registration is strongly recommended. A special arrangement for meeting participants has been made with the Continental Hotel (three star), which is located within about 10 minutes' driving. Please specify the exact dates of your stay in Cracow and the requested hotel, and send it together

with the full payment (student hostel) or an advance deposit equal to the price of one night (other hotels) before September 20, 1998.

Social Program: The conference fee includes the meeting lunches, the welcome reception, a social dinner, and an excursion on Saturday, October 10. Guided tours will be organized after the meeting.

Information: Contact either I. Filo or A. Madura, tel: +48-12-421-7011, +48-12-421-7154; fax: +48-12-421-7411; e-mail: `finmod23@uci.agh.edu.pl`, `pbf@uci.agh.edu.pl`; WWW: `http://galaxy.uci.agh.edu.pl/~finmod23/`.

9–10 AMS Southeastern Sectional Meeting, Wake Forest University, Winston-Salem, North Carolina. (Sept. 1997, p. 1031)

* **12–16 Immune System Modeling & Cell Signaling**, University of Minnesota, Minneapolis, Minnesota.

Organizers: B. Goldstein, D. Kirschner, A. Perelson, L. Segel.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu` or Web page: `http://www.ima.umn.edu/biology/`.

* **12–16 Symbolic Computation in Geometry and Analysis**, Mathematical Sciences Research Institute, Berkeley, California.

Focus: As part of the fall 1998 program on Symbolic Computation in Geometry and Analysis (SCGA), MSRI will host a weeklong workshop on Symbolic Computation.

Organizers: E. Becker (`becker@math.uni-dortmund.de`), Y. Lakshman (`ylakshma@mcs.drexel.edu`), M. Singer (`singer@math.ncsu.edu`), and P. Stiller (`stiller@math.tamu.edu`).

Aim: The aim of the workshop is to stimulate interaction between the long-term participants in the SCGA program and other members of the symbolic computation and general mathematical community who have not been able to come for an extended stay. It is hoped that holding such a workshop halfway through the special semester will increase the impact that the special semester will make on the mathematical community as well as allow for that community to influence the direction of research at MSRI.

Invited Speakers: D. Bayer, J. Buchmann, H. Derkson, Y.N. Lakshman, D. Manocha, P. Olver, B. Roth, and D. Zeilberger.

Financial Support: A limited amount of funding is available for partial support of people wishing to attend. Students, recent Ph.D.s, women, and minorities are particularly encouraged to apply. To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by July 1, 1998.

Information: Communications about this workshop should be sent either by e-mail to `scga@msri.org` or by regular mail to: Symbolic Computation Workshop, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.msri.org/activities/programs/9899/symbcomp/scga/`.

12–30 Third School on Nonlinear Functional Analysis and Applications to Differential Equations, Trieste, Italy. (Apr. 1998, p. 534)

14–17 Trends in Mathematical Physics, University of Tennessee, Knoxville, Tennessee. (Mar. 1998, p. 427)

* **16–17 18th Annual Southeastern-Atlantic Regional Conference on Differential Equations**, Auburn University, Auburn, Alabama.

Forum: The conference is an annual meeting which was envisioned by members of the Department of Mathematics at Virginia Tech and began in 1981. Since then its location has rotated among the institutions in the Southeast-Atlantic region.

Scope: These meetings afford established and new researchers, including advanced graduate students, the opportunity of meeting and exchanging ideas and discussing the wide variety of mathematics encompassed within the title "differential equations".

Topics: The conference will consist of a series of 4 plenary one-hour lectures and sessions for contributed papers. Topics presented during these conferences have been diverse in providing a unique opportunity to see the variety of problems in which differential equations play a critical role. Among subjects presented are ordinary and partial differential equations, integral and functional equations, numerical methods and applications to biology, physics, and engineering.

Invited Speakers: J. McLaughlin (Rensselaer Polytechnic Inst.), D. Shaeffer (Duke Univ.), R. Shivaji (Mississippi State Univ.), E. Yanagida (Univ. of Tokyo and Georgia Inst. of Tech.).

Financial Assistance: Contingent on NSF funding, some financial assistance may be available to offset travel and housing expenses for graduate students and recent Ph.D. recipients. Requests postmarked by September 18, 1998, are guaranteed consideration. People who belong to currently underrepresented groups are encouraged to apply to the conference for financial assistance.

Information: Updated information can be found at the conference Web site: `http://www.auburn.edu/searcde/`. Information can also be obtained by contacting: A. J. Meir, SEARCDE Coordinator, Department of Mathematics, Auburn Univ., Auburn, AL 36849; tel: 334-844-4290; fax: 334-844-6555; e-mail: `ajm@math.auburn.edu`.

18–20 Fourth IMACS International Symposium on Iterative Methods in Scientific Computation, Austin, Texas. (Apr. 1998, p.

534)

18–23 **IEEE Visualization 1998 (Vis98)**, Sheraton Imperial Hotel, Research Triangle Park, North Carolina. (May 1998, p. 642)

*19–23 **Forging an Appropriate Immune Response as a Problem in Distributed Artificial Intelligence**, University of Minnesota, Minneapolis, Minnesota.
Organizers: S. Forrest, L. Segel.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

*20–22 **International Conference on Number Theory and Related Topics**, Yonsei University, Seoul 120-749, Republic of Korea.
Sponsors: Natural Science Research Institute, Yonsei University, Korean Mathematical Society, and Korea Science and Engineering Foundation (KOSEF).
Organizers: K. S. Chang (chair, Yonsei Univ.), Y. Ihara (RIMS), H. J. Ko (Yonsei Univ.), J. K. Koo (KAIST), and J. H. Yang (Inha Univ.).
Invited Speakers: S. Bae (KAIST), Y. J. Choie (POSTECH), C. Deninger (Munster), Y. Ihara (RIMS), S.-J. Kang (Seoul), D. S. Kim (Sogang) S. Kudla (Maryland), J. B. Lee (Yonsei), S. Mochizuki (RIMS), D. Prasad (MRI), B. Ramakrishnan (MRI).
Call for Papers: We invite submissions for 30-minute presentations on any aspect of number theory. A one-page abstract typed by $\mathcal{A}_{\mathcal{M}}S$-TEX or LATEX must be received before October 1, 1998, to be considered for inclusion in the program. A refereed proceedings is planned to be published soon after the conference. Deadline for submitting papers for the proceedings is October 19, 1998. Send submissions to: J. H. Yang, Department of Mathematics, Inha Univ., Incheon 402-751, Korea, e-mail to `jhyang@math.inha.ac.kr`, fax: 82-32-874-5615, or H. J. Ko, Department of Mathematics, Yonsei Univ., Seoul 120-749, Korea, e-mail to `hjko@bubble.Yonsei.ac.kr`, fax: 82-2-392-6634.
Financial Support: Local accommodations are provided to participants whose papers are accepted for publication of the proceedings.
Information: For further information call 82-32-860-7626 or 82-2-361-2594 or e-mail and fax above.

22–23 **SIAM Workshop on Mathematical Foundations for Features in CAD, Engineering, and Manufacturing**, Somerset Inn, Troy, Michigan. (Jan. 1998, p. 113)

23–24 **The 20th Midwest Probabilty Colloquium**, Northwestern University, Evanston, Illinois. (May 1998, p. 642)

24–25 **AMS Eastern Sectional Meeting**, Pennsylvania State University, State College, PA. (Sept. 1997, p. 1031)
Information: R. Cascella, `rgc@ams.org`.

25–28 **Fractal 98, Complexity and Fractals in the Sciences**, Valletta, Malta. (Dec. 1997, p. 1500)

25–29 **Fields Institute Workshop on Monte Carlo Methods**, The Fields Institute for Research in Mathematical Sciences, Toronto, Ontario, Canada. (Feb. 1998, p. 295)

26–28 **2nd International Circuits, Systems and Computers'98 (CSC'98)**, Military Institutions of University Education (MIUE), Hellenic Naval Academy, Terma Hatzikyriakou, 18539, Piraeus, Greece. (Apr. 1998, p. 534)

*26–30 **Fourth International Conference on Principles and Practice of Constraint Programming (CP98)**, Pisa, Italy.
Scope: The conference is concerned with all aspects of computing with constraints including: algorithms, applications, environments, languages, models, systems. Contributions are welcome from any discipline concerned with constraints, including: artificial intelligence, combinatorial algorithms, computational logic, concurrent computation, databases, discrete mathematics, operations research, programming languages, symbolic computation. Papers that bridge disciplines or combine theory and practice are especially welcome.
Conference Chair: F. Rossi.
Program Co-Chairs: M. Maher and J.-F. Puget.
Workshop Chair: R. Yap.
Workshops: Satellite workshops will be organized on Friday, October 30, 1998. The details can be found in the call for workshop proposal, which can be seen on the CP98 Web page.
Information: `http://www.di.unipi.it/~bista/cp98/`.

*26–30 **School on Complex Tori, Integrable Systems and Seiberg-Witten Theory**, Grand Hotel Bellavista, Levico Terme (Trento), Italy.
Scientific Organizer: G. Bolondi (Milano).
Lectures: There will be 4 series of lectures held by: C. Birkenhake (Erlangen), R. Donagi (Philadelphia), B. van Geemen (Torino), and H. Lange (Erlangen).
Information: Contact G. Bolondi, e-mail: `bolondi@science.unitn.it`. Deadline for applications is July 31, 1998.

November 1998

*2–6 **Complexity of Continuous and Algebraic Mathematics**, Mathematical Sciences Research Institute, Berkeley, California.
Focus: Complexity theory has become a cornerstone in many areas involving computation. The workshop will emphasize areas for which the computational problems are especially mathematical, particularly areas resting on continuous mathematics and algebra. A spectrum of viewpoints will be represented, including those arising from algebraic complexity, numerical analysis (e.g., using condition numbers as complexity parameters), information-based complexity, and optimization (particularly linear programming).
Organizers: F. Cucker and J. Renegar.
Invited Speakers: A. Barvinok (Michigan), L. Blum (Hong Kong), F. Cucker (Barcelona and Hong Kong), J.-P. Dedieu (Toulouse), R. Freund (MIT), L. Khachiyan (Rutgers), P. Koiran (Lyon), T. Krick (Buenos Aires), H. W. Lenstra (Berkeley), J. Renegar (Cornell), S. Smale (Hong Kong), H. Wozniakowski (New York and Warzaw).
Financial Support: A limited amount of funding is available for partial support of people wishing to attend. Students, recent Ph.D.s, women, and minorities are particularly encouraged to apply. To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by August 19, 1998.
Information: Communications about this workshop should be sent either by e-mail to `ccam@msri.org` or by regular mail to: Complexity of Continuous and Algebraic Mathematics, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.damtp.cam.ac.uk/user/na/FoCM/MSRI_wshop.html`.

2–7 **International Conference on Potential Analysis**, Hammamet, Tunisia. (Mar. 1998, p. 427)

*8–11 **1998 IEEE Symposium on Foundations of Computer Science (FOCS'98)**, Palo Alto, California.
Topics: Algorithms and data structures, complexity theory, computational algebra and geometry, computational biology, cryptography, databases, machine learning, algorithmic graph theory and combinatorics, applications of logic, parallel and distributed computation, probabilistic computations, computer architectures, and robotics.
Submission: An abstract not exceeding 10 pages must be received by the program chair, R. Motwani (Gates Computer Science Building, 4B, Dept. of Comp. Sci., Stanford Univ., Stanford, CA 94305-9045). Electronic submission will be possible.
Machtey Award: This prize will be given to the best paper written solely by one or more students. An abstract is eligible if all authors are full-time students at the time of submission. This should be indicated in the submission letter. The program committee may decline to make the award, or may split it among several papers.
Program Committee: M. Ajtai, M. Bellare, A. Borodin, E. Cohen, S. Goldman, D. Karger, J. Kleinberg, R. Motwani, S. Naor, C. Papadimitriou, T. Pitassi, D. Spielman, E. Upfa, E. Welzl, D. Williamson, and F. Yao.
Information: `http://theory.stanford.edu/~focs98/`.

*9–13 **Dynamics and Control of AIDS**, University of Minnesota, Minneapolis, Minne-

sota.

Organizers: D. Kirschner, A. Perelson.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

14–15 AMS Western Sectional Meeting, University of Arizona, Tucson, AZ. (Sept. 1997, p. 1031)

Information: W. Drady, `wsd@ams.org`.

* **15–20 ASME Forum on Parallel Computing Methods**, Anaheim, California.

Call for Papers: Papers are solicited on all aspects of parallel computing methodology, including new and innovative methods. Papers on parallel strategies for shared and distributed memory architectures, heterogeneous clusters of workstations, and Pile-of-PCs are sought. Of particular interest are papers discussing applications of parallel algorithms and the effective use of parallel computing methods in industrial applications. Paper abstracts are due to the organizer by March 13, 1998, and may be submitted digitally or by hardcopy format. Notification of abstract acceptance is by April 3, 1998, and the final paper is due to the organizer by June 29, 1998.

Organizers: Fluids Engineering Division, as part of the American Society of Mechanical Engineers (ASME) 1998 International Mechanical Engineering Congress and Exposition (IMECE).

Information and Submission: C. J. Freitas, Principal Engineer—Computational Mechanics, Southwest Research Institute, 6220 Culebra Road, San Antonio, TX 78238-5166; tel: 210-522-2137; fax: 210-522-3042; e-mail: `cfreitas@swri.edu`.

* **17–19 Mal'tsev Meeting**, The Institute of Mathematics, Novosibirsk, Russia.

Topics: Algebra and logic.

Organizers: The Siberian Foundation for Algebra and Logic, together with the Institute of Mathematics (Siberian Branch of the Russian Academy of Sciences) and the Research Institute for Mathematical and Information Bases of Education (Novosibirsk State University).

Information: `http://math.nsc.ru/conference/malmeet/`.

21–22 DIMACS Workshops: Reconnecting Two-Year College Faculty to the Mathematical Sciences Enterprise, DIMACS Center, Rutgers University, Piscataway, New Jersey. (Apr. 1998, p. 534)

* **30–December 5 Neural Information Processing Systems: Natural and Synthetic**, Denver, Colorado.

Forum: This is the twelfth meeting of an interdisciplinary conference which brings together cognitive scientists, computer scientists, engineers, neuroscientists, physicists, and mathematicians interested in all aspects of neural processing and computation. The conference will include invited talks and oral and poster presentations of refereed papers. The conference is single track and is highly selective. Preceding the main session there will be one day of tutorial presentations (Nov. 30), and following it there will be two days of focused workshops on topical issues at a nearby ski area (Dec. 4–5).

Topics: Major categories for paper submission are as follows: Algorithms and Architectures, Applications, Artificial Intelligence, Cognitive Science, Implementation, Neuroscience, Reinforcement Learning and Control, Speech and Signal Processing, Theory, and Visual Processing.

Organizing Committee: D. Baker (Carnegie Mellon Univ.), J. Baxter (Australian National Univ.), S. Becker (McMaster Univ.), G. Blasdel (Harvard Medical School), D. Cohn (Harlequin), S. Hanson (Rutgers Univ.), M. Kearns (AT&T Labs Research), S. Kirkpatrick (IBM), B. Mel (Univ. of Southern California), K. Mueller (GMD First), S. Solla (Northwestern Univ.), and G. Tesauro (IBM).

Program Committee: A. Barto (Univ. of Massachusetts), J. Buhmann (Univ. of Bonn), Y. Freund (AT&T Labs Research), L. K. Hansen (Danish Technical Univ.), N. Intrator (Brown Univ.), R. Jacobs (Univ. of Rochester), E. Levin (AT&T Labs Research), A. Pouget (Georgetown Univ.), D. Saad (Aston Univ.), L. Saul (AT&T Labs Research), S. Solla (Northwestern Univ., chair), S. Thrun (Carnegie Mellon Univ.), Y. Weiss (MIT).

Review Criteria: All submitted papers will be thoroughly refereed on the basis of technical quality, significance, and clarity. Novelty of the work is also a strong consideration in paper selection, but to encourage interdisciplinary contributions, we will consider work which has been submitted or presented in part elsewhere if it is unlikely to have been seen by the NIPS audience. Authors should not be dissuaded from submitting recent work, as there will be an opportunity after the meeting to revise accepted manuscripts before submitting final camera-ready copy.

Paper Format: Submitted papers may be up to seven pages in length, including figures and references, using a font no smaller than 10 point. Text is to be confined within an 8.25 in. by 5 in. rectangle. Submissions failing to follow these guidelines will not be considered. Authors are strongly encouraged to use the NIPS LaTeX style files obtainable by anonymous FTP at the site given below. Papers must indicate (1) physical and e-mail addresses of all authors; (2) one of the nine major categories listed above, and a subcategory if desired; (3) if the work, or any substantial part thereof, has been submitted to or has appeared in other scientific conferences; (4) the authors' preference, if any, for oral or poster presentation (this preference will play no role in paper acceptance); and (5) author to whom correspondence should be addressed.

Submission Instructions: Send eight copies of submitted papers to the address below; electronic or fax submission is not acceptable. Include one additional copy of the abstract only, to be used for preparation of the abstracts booklet distributed at the meeting. Submissions must be received by **May 22, 1998**. From within the U.S., submissions will be accepted if mailed first class and postmarked by May 19, 1998. Mail submissions to: S. A. Solla, NIPS*98 Program Chair, Dept. of Physiology, Ward Building 5-003, MC211, Northwestern University Medical School, 303 E. Chicago Avenue, Chicago, IL 60611-3008. Copies of the LaTeX style files for NIPS are available via anonymous FTP at `ftp.cs.cmu.edu` (128.2.206.173) in `/afs/cs/Web/Groups/NIPS/formatting`. The style files and other conference information may also be retrieved via World Wide Web at `http://www.cs.cmu.edu/Web/Groups/NIPS`.

Information: Mail general inquiries and requests for registration material to: NIPS Foundation, Computational Neurobiology Laboratory, Salk Institute for Biological Studies, 10010 North Torrey Pines Road, La Jolla, CA 92037; fax: 619-587-0417; e-mail: `nipsinfo@salk.edu`.

December 1998

* **4–5 NIPS*98 Post Conference Workshops**, Breckenridge, Colorado.

Call for Proposals: Following the regular program of the Neural Information Processing Systems 1998 conference, workshops on current topics in neural information processing will be held on December 4 and 5, 1998, in Breckenridge, Colorado. Proposals by qualified individuals interested in chairing one of these workshops are solicited. Past topics have included: Active Learning, Architectural Issues, Attention, Audition, Bayesian Analysis, Bayesian Networks, Benchmarking, Brain Imaging, Computational Complexity, Computational Molecular Biology, Control, Genetic Algorithms, Graphical Models, Hippocampus and Memory, Hybrid HMM/ANN Systems, Implementations, Music, Neural Plasticity, Language Processing, Lexical Acquisition, Network Dynamics, On-Line Learning, Optimization, Recurrent Nets, Robot Learning, Rule Extraction, Self-Organization, Sensory Biophysics, Signal Processing, Support Vectors, Speech, Time Series, Topological Maps, and Vision Models and Applications. Workshop organizers will have responsibilities including: (1) coordinating workshop participation and content, which involves arranging short informal presentations by experts working in an area, arranging for expert commentators to sit on a discussion panel, and formulating a set of discussion topics, etc.; (2) moderating or leading the discussion and reporting its high points, findings, and conclusions to the group during evening plenary sessions; and (3) writing a brief summary and/or coordinating submitted material for postconference electronic dissemination.

Goal: The goal of the workshops is to provide an informal forum for researchers to discuss important issues of current interest. There will be two workshop sessions a day, for a total of six hours, with free time in between for ongoing individual exchange or outdoor activities. Concrete open and/or controversial issues are encouraged and preferred as workshop topics. Representation of alternative viewpoints and panel-style discussions are particularly encouraged.

Submission Instructions: Interested parties should submit via e-mail a short proposal for a workshop of interest by May 29, 1998. Proposals should include a title, a description of what the workshop is to address and accomplish, the proposed length of the workshop (one day or two days), the planned format (miniconference, panel discussion, or group discussion, combinations of the above, etc.), and the proposed number of speakers. Where possible, please also indicate potential invitees (particularly for panel discussions). Please note that this year we are looking for fewer "miniconference" workshops and a greater variety of workshop formats. The time allotted to workshops is six hours each day in two sessions of three hours each. We strongly encourage the organizers to reserve a significant portion of time for open discussion. The proposal should explain why the topic is of interest or controversial, why it should be discussed, and who the targeted group of participants is. In addition, please send a brief résumé of the prospective workshop chair, a list of publications, and evidence of scholarship in the field of interest. Submissions should include contact name, address, e-mail address, phone number, and fax number if available. Proposals should be mailed electronically to `zemel@u.arizona.edu`. All proposals must be received by **May 29, 1998**. If e-mail is unavailable, mail to arrive by the deadline to: NIPS*98 Workshops, c/o R. Zemel, Dept. of Psychology, Univ. of Arizona, Tucson, AZ 85721.

Information: Questions may be addressed to either of the workshop co-chairs: S. Becker, McMaster Univ., `becker@mcmaster.ca`, or R. Zemel at the above address.

14–18 **First International Conference on Semigroups of Operators, Theory and Applications**, Marriot Hotel, Newport Beach, California. (Feb. 1998, p. 296)

16–22 **Symmetry and Perturbation Theory II**, Rome, Italy. (Apr. 1998, p. 534)

19–21 **(ORSI Convention) International Conference on Operations Research and Industry**, Institute of Basic Science, Agra, India. (May 1998, p. 642)

* 23–25 **The Joint Annual Conference of the Bharat Ganita Parisad and the Jammu Mathematical Society–A symposium on functional analysis and applications**, Department of Mathematics, Lucknow University, Lucknow, India.

Information: Interested persons should contact R. K. Singh, President BGP and JMS, Dept. of Math., Univ. of Jammu, India, or S. Datta, Head, Dept. of Math. and Astronomy, Lucknow Univ., Lucknow, India.

January 1999

January–June **The Fields Institute for Research in Mathematical Sciences Program in Probability and Its Applications**, The Fields Institute, Toronto, Ontario, Canada. (Sept. 1997, p. 1031)

* 4–8 **Cell Adhesion and Motility**, University of Minnesota, Minneapolis, Minnesota.
Organizers: W. Alt, R. T. Tranquillo.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

8–9 **Nonlinear Differential Equations: A Meeting Honoring Professor Alan Lazer on the Occasion of his 60th Birthday**, The University of Miami, Coral Gables, Florida. (Apr. 1998, p. 535)

8–12 **Twenty-third Holiday Symposium: Algebraic Structures For Logic**, New Mexico State University, Las Cruces, New Mexico. (May 1998, p. 642)

13–16 **Joint Mathematics Meeting**, San Antonio Convention Center, San Antonio, Texas. (Sept. 1997, p. 1031)

15–16 **ASL Winter Meeting (in conjunction with AMS meeting)**, San Antonio, Texas. (May 1998, p. 642)

* 17–19 **Tenth Annual ACM-SIAM Symposium on Discrete Algorithms (SODA'99)**, Omni Inner Harbor Hotel, Baltimore, Maryland.
Sponsor: ACM Special Interest Group on Algorithms and Computation Theory and SIAM Activity Group on Discrete Mathematics.
Organizer: To be determined.
Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

* 19–23 **Introductory Workshop in Random Matrix Models and their Applications**, Mathematical Sciences Research Institute, Berkeley, California.
Aim: The introductory workshop plays a pivotal role in the program, whose main goal is to create a common understanding of the various problems and new ideas which have recently arisen in the theory of random matrices. This workshop is not intended for the specialist, although many experts will be there to participate and interact with others interested in learning about this material, but rather for the mathematician in any field who would like to know more about these exciting areas and their applications in other parts of mathematics. The workshop will be a mini-version of the entire semester and is intended to give an overview of the whole program. To that end, several short series of lectures (one series = two or three one-hour lectures) given by the experts in the various aspects of the program and addressed to a broad audience will be organized. The topics of the lectures will be chosen to exhibit the relation of random matrix models to completely integrable systems; the Riemann-Hilbert and Virasoro algebra approaches; the related developments in topological field theories, exactly solvable statistical mechanics models, and representation theory of quantum affine algebras; relations to number theory and to quantum chaos. There will be four lectures each day supplemented by informal discussions and ad hoc seminars.
Invited Speakers: R. Baxter, E. Brizin, P. Deift, B. Dubrovin, M. Jimbo, M. Mehta, P. van Mverbeke, P. Sarnak, C. Tracy, H. Widom, and X. Zhou.
Financial Support: A limited amount of funding is available for partial support of people wishing to attend. The organisers have great interest in attracting to the workshop participants from all types of institutions and all backgrounds, including researchers from areas outside the main subjects of the workshop. They are in particular strongly encouraging mathematicians from traditionally underrepresented groups to apply. To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by October 9, 1998.
Information: Communications about this workshop should be sent either by e-mail to `rmintro@msri.org` or by regular mail to: Introductory Workshop in Random Matrix Models, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.msri.org/activities/programs/9899/random/rmintro/`.

* 25–29 **Computational Modeling in Biological Fluid Dynamics**, University of Minnesota, Minneapolis, Minnesota.
Organizers: L. Fauci, S. Gueron.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

February 1999

7–11 **35th Australasian Applied Mathematics Conference**, Mollymook Golf Club, Ulladulla, New South Wales. (Dec. 1997, p. 1500)

* 8–12 **Membrane Transport and Renal Physiology**, University of Minnesota, Min-

neapolis, Minnesota.
Organizers: H. Layton, A. Weinstein.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 13 **Hormones**, University of Minnesota, Minneapolis, Minnesota.
Organizers: J. Sneyd.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 15-19 **Endocrinology: Mechanism of Hormone Secretion and Control**, University of Minnesota, Minneapolis, Minnesota.
Organizers: A. Goldbeter, M. Mackey, A. Sherman, and J. Sneyd.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 22-26 **Random Matrices, Statistical Mechanics, and Integrable Systems**, Mathematical Sciences Research Institute, Berkeley, California.
Aim: This workshop will focus on the relations of random matrices to integrable systems and to exactly solvable statistical mechanics and topological field models.
Topics: The following three groups of topics will be of primary interest: (1) Random matrices, orthogonal polynomials, and integrable systems of differential equations of the Painlevi and KP types. The Riemann-Hilbert and isomonodromy approaches and their relations to semiclassical analysis. The vertex operators and Virasoro algebra techniques; (2) Correlation functions of exactly solvable quantum field and statistical mechanics models. The quantum Calogero-Sutherland and Calogero-Moser systems and the Knishnik-Zamolodchikov equation. XXX and XXZ models and the quantum Knishnik-Zamolodchikov equation. Relations to the q-special functions and to the representation theory of quantum affine algebras; (3) Matrix integrals and topology of the moduli spaces of algebraic curves. Relations to topological field theories. Frobenius manifolds, Painlevi transcendents, and isomonodromy deformations.
Objectives: The indicated directions share several common analytic and algebraic features, e.g. Riemann-Hilbert problem, integrable Fredholm operators, Virasoro algebra, KP and Toda hierarchies, etc. One of the principal objectives of the workshop is to discuss extensively these remarkable similarities and hence to advance in understanding of the basic mathematical

structures that lie behind them.
Financial Support: To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by November 13, 1998.
Information: Communications about this workshop should be sent either by e-mail to `statmech@msri.org` or by regular mail to: Workshop in Random Matrices, Statistical Mechanics, and Integrable Systems, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.msri.org/activities/programs/9899/random/statmech/`.

March 1999

* 5 **Audition**, University of Minnesota, Minneapolis, Minnesota.
Speaker: M. Reed.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 7-13 **Dirac Operators, Index Theorems and Numerical Invariants of Manifolds**, Greifswald University, Germany, Island of Usedom.
Topics: All relations between differential operators, geometry and topology of manifolds. There will be a short series of 1-3-hour talks, and a limited number of participants will have the possibility of presenting their own results.
Organizing Committee: J. Eichhorn (Greifswald), Th. Friedrich (Berlin), W. Lueck (Muenster).
Information: Applications should be sent to J. Eichhorn, Institut für Mathematik und Informatik, Jahnstrasse 15a, D-17487 Greifswald, Germany; e-mail: `eichhorn@rz.uni-greifswald.de`.

* 8-12 **Audition**, University of Minnesota, Minneapolis, Minnesota.
Organizers: M. Reed, E. Young.
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 12-13 **AMS Southeastern Section Meeting**, University of Florida, Gainesville, Florida.
Information: R. Coscella, `rgc@ams.org`.

* 16-20 **1999 UAB-GIT International Conference on Differential Equations and Mathematical Physics**, University of Alabama at Birmingham, Birmingham, Alabama.
Aim: The Department of Mathematics at the Univ. of Alabama at Birmingham is hosting

an international conference on differential equations and mathematical physics. This conference is part of a series held alternatively at UAB and the Georgia Institute of Technology in Atlanta.
Topics: Topics in the general area of linear and nonlinear differential equations and their relation to mathematical physics will be emphasized. This will include topics such as the analysis of multiparticle Schroedinger operators, stability of matter, relativity theory, spectral and scattering theory including inverse problems, fluid dynamics, and geometric analysis, as well as related topics.
Plenary Speakers: The conference will consist of ten plenary lectures, parallel special sessions for 30-minute invited talks, and contributed talks. The plenary speakers are: S. Y. A. Chang (UCLA), D. Christodoulou (Princeton), P. Lax (Courant Institute), E. Lieb (Princeton), P. L. Lions (Paris IX), A. I. Nachman (Rochester), S. P. Novikov (Steklov Institute), B. Simon (Cal Tech), J. Smoller (Ann Arbor), and J. Yngvason (Vienna).
Special Sessions: Special sessions on the following topics are planned: general relativity, integrable systems, PDEs in geometry, quantum mechanics, spectral theory, and inverse problems. Other special sessions may be planned.
Information: Further information and updates will be posted on the conference Web site `http://www.math.uab.edu/uabgit99/`.

18-21 **AMS Central Sectional Meeting**, University of Illinois-Urbana, Urbana, Illinois. (Aug. 1997, p. 846)

20-23 **ASL Annual Meeting**, San Diego, California. (May 1998, p. 642)

* 22-24 **Ninth SIAM Conference on Parallel Processing for Scientific Computing**, Adam's Mark San Antonio-Riverwalk Hotel, San Antonio, Texas.
Sponsor: SIAM Activity Group on Supercomputing.
Organizers: B. Hendrickson (Sandia National Labs., Albuquerque) and K. Yelick (Univ. of California, Berkeley).
Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

* 24-27 **Fifth SIAM Conference on Mathematical and Computational Issues in the Geosciences**, Adam's Mark San Antonio-Riverwalk Hotel, San Antonio, Texas.
Sponsor: SIAM Activity Group on Geosciences.
Organizer: C. N. Dawson (Univ. of Texas, Austin).
Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@`

siam.org; SIAM home page: `http://www.siam.org/conf.htm`.

April 1999

* 7–9 **Fourth International Conference on Typed Lambda Calculi and Applications (TLCA'99)**, l'Aquila, Italy.

Aim: The TLCA series of conferences aims at providing a forum for the presentation and discussion of recent research in an area which was originally a rather restricted field but has now considerably expanded.

Topics: The following list of topics is non-limitative: Proof-theory, cut-elimination and normalization, linear logic, semantic, denotational semantics, game semantics, operationality, abstract machines, parallel execution, typing, subtypes, type assignment systems, programming, proof search, type checking.

Program: The program of TLCA'99 will consist of about 30 selected presentations in plenary sessions.

Program Committee: S. Abramsky (Univ. of Edinburgh), T. Coquand (Göteborgs Univ.), J.-Y. Girard (IML/Marseille, chair), R. Hindley (Univ. of Wales Swansea), J.-L. Krivine (Univ. Paris VII), J. Reynolds (Carnegie-Mellon Univ., Pittsburgh), S. Ronchi (Univ. di Torino), A. Scedrov (Univ. of Pennsylvania), T. Streicher (Technische Univ. Darmstadt), M. Takahashi (Tôkyô Kôgyô Daigaku), P. Urzyczyn (Uniwersytet Warszawski).

Paper Submission: Original contributions should be sent by e-mail (PostScript files only) to `tlca99@iml.univ-mrs.fr` and a short abstract should be sent as a separate e-mail; it should use only standard ASCII characters. Hard copy (6 copies) is also acceptable, to the address: J.-Y. Girard, Institute de Mathématiques de Luminy, 163 Avenue de Luminy, case 907, 13288 Marseille cedex 9, France; fax: +33-491269655. All submissions must be received by Sept. 4, 1998. Papers should not exceed 15 standard A4 or U.S. quarto pages and should allow the Programme Committee to assess the merits of the work: in particular references and comparisons with related work should be included. Submission of material already published or submitted to other conferences with Proceedings is not allowed. The accepted papers will be published as a volume of Springer Lecture Notes in Computer Science.

Important Dates: Submissions: September 4, 1998; acceptance/rejection: November 16, 1998; definitive versions due: January 4, 1999.

Information: More details about the Conference will become available later from the Organizing Committee Chairman, B. Intrigila, Dipartimento di Matematica, Università di l'Aquila, Via Vetoio, Loc. Coppito, 67100 l'Aquila, Italy; e-mail: `tlca99.aquila@univaq.it`; fax: +39-862-433180; or at the home page: `http://w3.dm.univaq.it/tlca99/`.

10–11 **AMS Western Sectional Meeting**, University of Nevada, Las Vegas, NV. (Apr. 1997, p. 481)

Information: W. Drady, `wsd@ams.org`.

12–15 **Nonlinear Evolution Equations and Wave Phenomena: Computation and Theory**, Athens, Georgia. (Apr. 1998, p. 535)

17–19 **Weekend Algebra Conference**, University of Southern Mississippi, Hattiesburg, Mississippi. (Jan. 1998, p. 113)

* 19–23 **Local Interaction and Global Phenomena in Vegetation and Other Systems**, University of Minnesota, Minneapolis, Minnesota.

Organizers: S. Levin, C. Neuhauser.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

24–25 **AMS Eastern Sectional Meeting**, State University of New York, Buffalo, NY. (Apr. 1997, p. 481)

Information: R. Cascella, `rgc@ams.org`.

May 1999

* 10–12 **Sixth SIAM Conference on Optimization**, Radisson Atlanta Hotel, Atlanta, Georgia.

Sponsor: SIAM Activity Group on Optimization.

Organizers: P. E. Gill (Univ. of California, San Diego); C. T. Kelley (North Carolina State Univ.).

Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

* 12–15 **1999 SIAM Annual Meeting**, Radisson Atlanta Hotel, Atlanta, Georgia.

Organizers: F. R. K. Chung (Univ. of Pennsylvania) and J. J. Dongarra (Univ. of Tennessee, Knoxville, and Oak Ridge National Lab.).

Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

* 13–14 **Introduction to Epidemiology and Immunology**, University of Minnesota, Minneapolis, Minnesota.

Speakers: C. Castillo-Chavez, D. Kirschner, H. Thieme, J. Velasco-Hernandes.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 17–21 **Mathematical Approaches for Emerging and Reemerging Infectious Dis-eases**, University of Minnesota, Minneapolis, Minnesota.

Organizers: S. Blower, C. Castillo-Chavez, K. Cooke, D. Kirschner, P. van den Driessche.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 24–28 **Fifth SIAM Conference on Applications of Dynamical Systems**, Snowbird Ski and Summer Resort, Snowbird, Utah.

Sponsor: SIAM Activity Group on Dynamical Systems.

Organizers: D. Armbruster (Arizona St. Univ.) and E. Stone (Utah St. Univ.).

Information: SIAM Conference Coordinator, 3600 University City Science Center, Philadelphia, PA 19104-2688; tel: 215-382-9800; fax: 215-386-7999; e-mail: `meetings@siam.org`; SIAM home page: `http://www.siam.org/conf.htm`.

June 1999

* 7–11 **From Individual to Aggregation: Modeling Animal Grouping**, University of Minnesota, Minneapolis, Minnesota.

Organizers: R. Durrett, L. Edelstein-Keshet, S. Levin, M. Lewis.

Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/biology/`.

* 7–11 **Random Matrices and Their Applications: Quantum Chaos, GUE Conjecture for Zeros of Zeta Functions, Combinatorics, and All That**, Mathematical Sciences Research Institute, Berkeley, California.

Focus: This workshop will focus on problems arising in different fields: quantum mechanics, number theory, statistical mechanics, combinatorics, representation theory, and others, which demonstrate surprising universal behavior described by the ensembles of random matrices and random polynomials. The idea of the workshop is to bring together people working in different areas on the problems related to scaling limits and universality and discuss deep hidden connections between these problems.

Topics: The topics of this workshop will include: (1) GUE conjecture for zeros of zeta functions. Mathematical results in the theory of quantum chaos. Poisson conjecture and distribution of values of polynomial forms. Statistical properties of eigenfunctions of integrable and chaotic quantum systems; (2) Universal properties of distribution of eigenvalues and eigenvectors in ensembles of random matrices. Scaling limits, double scaling limits, and their relation to the Painlevi transcendents and their higher generalizations. Correlations between zeros of random polynomials and

their application to the problem of universality of the eigenfunction statistics for chaotic quantum systems. Random matrices and noncommutative probability theory; (3) Random matrices in combinatorics and representation theory. Scaling and double scaling limits for the longest increasing subsequence, Young's diagrams, etc. and their relation to the Painlevi transcendents.

Financial Support: To apply for funding, send a letter explaining your interest in the workshop together with a vita or bibliography and a budget for travel/living expenses. If you are a student, also solicit a letter from a faculty advisor. All information should be received by February 12, 1999.

Information: Communications about this workshop should be sent either by e-mail to `qc@msri.org` or by regular mail to: Workshop in Quantum Chaos, GUE Conjecture, Mathematical Sciences Research Institute, 1000 Centennial Drive, Berkeley, CA 94720-5070; `http://www.msri.org/activities/programs/9899/random/qc/`.

The following new announcements will not be repeated until the criteria in the next to the last paragraph at the bottom of the first page of this section are met.

August 1999

* 2–13 **IMA Summer Program: IMA Workshop on Codes, Systems and Graphical Models**, University of Minnesota, Minneapolis, Minnesota.
Organizers: D. Forney (Motorola), B. Marcus (IBM), J. Rosenthal (U. Notre Dame), A. Vardy (U. Illinois).
Information: Institute for Mathematics and its Applications, Univ. of Minnesota, 206 Church St. SE, Minneapolis, MN 55455; tel: 612-624-6066, e-mail: `staff@ima.umn.edu`, or Web page: `http://www.ima.umn.edu/csg/`.

* 9–14 **Gyorgy Alexits Memorial Conference**, Budapest, Hungary.
Organizer: Janos Bolyai Mathematical Society.
Organizing Committee: K. Tandori, honorary chair, L. Leindler, F. Schipp and J. Szabados, co-chairs, F. Msricz, V. Totik, P. Virtesi, S. Fridli, secretary.
Topics: Function series, Fourier analysis, summability and expansions, interpolation, inequalities.
Information: S. Fridli, e-mail: `fridli@ludens.elte.hu`.