
Mathematics Calendar

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

September 2002

September 2002 International Conference on Mathematics and Economics Dedicated to the 90th Anniversary of Leonid Kantorovich, Euler International Mathematical Institute, St. Petersburg, Russia.

Brief Description: Academician Leonid Kantorovich (1912–86), the Nobel Prize winner in economics (1975) and an outstanding mathematician of the twentieth century, was born 90 years ago. The conference is dedicated to a modern outlook on the tremendous contributions made by Leonid Kantorovich both to various areas of pure and applied mathematics and to economics. Talks will be presented on invitation of the Organizing Committee. Round tables on major directions of Kantorovich research will be organized.

Organizing Committee: A. Bukhvalov (St. Petersburg State Univ.); L. Faddeev (St. Petersburg Branch of Mathematical Institute, RAS); V. Makarov (Central Institute for Mathematical Economics, RAS); co-chairman, V. Pavlov (Mathematical Institute RAS, Moscow); J. Romanovsky (St. Petersburg State Univ.); A. Sergeev (Moscow State Institute for International Relations); Yu. Vasiliev (Novosibirsk Mathematical Institute, RAS); A. Vershik (St. Petersburg Branch of Mathematical Institute, RAS), co-chairman.

Information: e-mail: admin@euler.pdmi.ras.ru, bukh@pop3.rcm.ru.

September–December 2002 Set Theory and Analysis Program, The Fields Inst., Toronto, Ontario, Canada. (Oct. 2001, p. 1051)

Organizing Committee: A. Dow, A. Kechris, M. Laczkovich, C. Laflamme, J. Steprans, S. Todorcevic.

Program: From its very beginnings, set theory has enjoyed a relationship with analysis which, while at times close and at others

distant, has always allowed for the possibility of symbiosis. During the fall of 2002 The Fields Institute will host a thematic program devoted to fostering the interaction between these two areas. Internationally recognized experts from both disciplines will be on site from September 2002 through December 2002.

Format: The format of the program will include at least two short but intense thematic workshops. One will focus on set theoretic techniques in the theory of Banach spaces, and another will concentrate on Borel relations. While some participants will actively participate throughout the semester, others will be brought in for a specific workshop. Graduate students and postdoctoral fellows on site for the entire program will be exposed to a wide range of research topics, while invited specialists will be able to contribute in their area of expertise. The program will also incorporate, whenever possible, minicourses intended to quickly bring graduate students to the frontiers of knowledge on particular subjects.

Participants: Among those who have already indicated their interest in participating for at least part of the semester are: T. Bartoszynski, M. Foreman, D. Fremlin, G. Godefroy, G. Hjorth, A. Kechris, M. Laczkovich, R. Laver, D. Mauldin, A. Miller, N. Kalton, E. Odell, J. Pawlikowski, H. Rosenthal, S. Shelah, S. Solecki, S. Todorcevic, H. Woodin.

Information: To be informed when registration is open and to receive updates about the Set Theory and Analysis Program, please subscribe to the mail list at <http://www.fields.utoronto.ca/maillist/>.

1–5 3rd WSEAS International MultiConference on Applied and Theoretical Mathematics, Miedzyzdroje, Poland.

Information: <http://www.wseas.org/conferences/2002/>

This section contains announcements of meetings and conferences of interest to some segment of the mathematical public, including ad hoc, local, or regional meetings, and meetings and symposia devoted to specialized topics, as well as announcements of regularly scheduled meetings of national or international mathematical organizations. A complete list of meetings of the Society can be found on the last page of each issue.

An announcement will be published in the *Notices* if it contains a call for papers and specifies the place, date, subject (when applicable), and the speakers; a second announcement will be published only if there are changes or necessary additional information. Once an announcement has appeared, the event will be briefly noted in every third issue until it has been held and a reference will be given in parentheses to the month, year, and page of the issue in which the complete information appeared. Asterisks (*) mark those announcements containing new or revised information.

In general, announcements of meetings and conferences held in North America carry only the date, title of meeting, place of meeting, names of speakers (or sometimes a general statement on the program), deadlines for abstracts or contributed papers, and source of further information. Meetings held outside the North American area may carry more detailed information. In any case, if there is any application deadline with

respect to participation in the meeting, this fact should be noted. All communications on meetings and conferences in the mathematical sciences should be sent to the Editor of the *Notices* in care of the American Mathematical Society in Providence or electronically to notices@ams.org or mathcal@ams.org.

In order to allow participants to arrange their travel plans, organizers of meetings are urged to submit information for these listings early enough to allow them to appear in more than one issue of the *Notices* prior to the meeting in question. To achieve this, listings should be received in Providence **six months** prior to the scheduled date of the meeting.

The complete listing of the Mathematics Calendar will be published only in the September issue of the *Notices*. The March, June, and December issues will include, along with new announcements, references to any previously announced meetings and conferences occurring within the twelve-month period following the month of those issues. New information about meetings and conferences that will occur later than the twelve-month period will be announced once in full and will not be repeated until the date of the conference or meeting falls within the twelve-month period.

The Mathematics Calendar, as well as Meetings and Conferences of the AMS, is now available electronically through the AMS website on the World Wide Web. To access the AMS website, use the URL: <http://www.ams.org/>.

poland/;e-mail: math2002@wseas.org.

1-8 17th International Workshop on Differential Geometric Methods in Theoretical Mechanics, Levico Terme, Trento, Italy. (May 2002, p. 607)

Scientific Organizer: E. Pagani (Trento).

Information: First Announcement at <http://www.science.unitn.it/cirm/DGMTM.1ann.html>.

1-9 8th International Congress on Algebraic Hyperstructures and Applications (AHA 2002), Democritus University of Thrace, Samothraki Island, Greece. (Mar. 2002, p. 359)

Topics: The congress will cover the following topics: hypergroups, semihypergroups, hypergroupoids, hyperrings, hyperfields, hyper-vectorial spaces, H_ν -structures (H_ν -groups, semigroups, rings), nonassociative and feebly associative hypergroupoids, join spaces, hyperstructures associated to geometric spaces, ordered hyperstructures, fuzzy hyperstructures, hypergraphs, generalizations and applications. There will be invited lecturers and special sessions for talks of twenty (20) minutes.

Dates: The second announcement will be sent to the interested researchers by the end of December 2001. Registration, March 31, 2002; abstracts, April 30, 2002; final announcement, June 15, 2002.

Information and Registration: aha2002@agro.duth.gr.

2-6 BISCA-2002: Design and Cognition, Bolzano, Italy.

Description: Most of the world that we know is designed. Furthermore, almost everyone in the Western world has become a designer at their personal computers (e.g., publishing their own webpages). Design has become everyone's domain, and the 21st century communicates via design.

Organizer: Mitteleuropa Foundation.

Speakers: John Gero, Professor of Design Science and Co-Director of the Key Centre of Design Computing and Cognition, Department of Architectural and Design Science, at the University of Sydney; Michael Leyton, Center for Discrete Mathematics and Theoretical Computer Science at Rutgers; Michael Pratt, Professor of Computer Aided Engineering and Head of the Department of Applied Computing and Mathematics at Cranfield University in the UK; Gerhard Schmitt, Professor of Architecture and Computer Aided Architectural Design (CAAD) at the Department of Architecture of the Swiss Federal Institute of Technology (ETH), Zürich; and architect Daniel Libeskind.

Information: Attendance will be limited to about 35 participants. Each speaker will give 4 lectures, with ample time for discussion. All lectures will be in English. For more information write to L. Albertazzi (Mitteleuropa Foundation, 30 Portici Street, 39100 Bolzano, Italy), or send e-mail (liliana.albertazzi@soc.unitn.it). Information about Bolzano is available from the city's tourist office: <http://www.sudtirolo.com/bolzano/>; website: <http://www.mittleuropafoundation.it/events.htm>.

2-7 VI International Workshop on Complex Structures, Vector Fields and Applications, St. Constantine, near Varna/Bulgaria. (Mar. 2002, p. 359)

Main Purpose: Bringing together specialists in complex analysis, potential theory, differential geometry, mathematical physics and applications for stimulating cross-disciplinary activities. Lectures: There will be two types of lectures. The first type of lecture will present the up-to-date state of the subject and could be considered as an introduction in large research domains. The second type of lecture will be authors' contributions.

Organizers: Niigata University (Japan): K. Sekigawa, H. Hashimoto; Bulgarian Academy of Sciences; Institute of Mathematics and Informatics: S. Dimiev, R. Lazov; Institute of Nuclear Research and Nuclear Energetics: S. Manov.

Registration Fee: US\$150 including the price of the proceedings volume. Accommodation and meals: no more than US\$40 per day.

2-7 Poisson 2002-Conference on Poisson Geometry, Instituto Superior Tecnico, Lisbon, Portugal.

Description: The conference will start on Monday, September 2, in the morning, and finish on Saturday, September 7, in the afternoon, with two half-days for sightseeing.

Confirmed Speakers Include: A. Alekseev (Geneva), M. Bertelson (Brussels), A. Cattaneo (Zurich), M. Crainic (Utrecht), J.-P. Dufour (Montpellier), E. Getzler (Northwestern), V. Ginzburg (Santa Cruz), V. Guillemin (MIT), J. Huebschmann (Lille), B. Khesin (Toronto), Y. Karshon (Jerusalem), J.-H. Lu (Arizona), Y. Maeda (Keio), E. Meinrenken (Toronto), J.-P. Ortega (Nice), T. Ratiu (Lausanne), N. Reshetikhin (Berkeley), D. Roytberg (Penn State), P. Severa (Bratislava), A. Weinstein (Berkeley), C. Woodward (Rutgers), P. Xu (Penn State), N. T. Zung (Montpellier).

Information: <http://www.math.ist.utl.pt/Poisson2002/>.

4-6 The Fourth International Workshop on Automated Deduction in Geometry, RISC-Linz, Hagenberg, Austria. (Mar. 2002, p. 359)

Description: The fourth workshop ADG 2002 to be held in Hagenberg (near Linz), Austria, September 2002, will continue ADG's emphasis on theory and algorithms, implementation, experiments, and applications to science, engineering and industry.

Important Dates: Deadline for extended abstract submission: June 3, 2002; notification of acceptance or rejection: July 3, 2002; workshop taking place: September 4-6, 2002; deadline for full paper submission: November 4, 2002.

Topics: Specific topics for ADG 2002 include (but are not limited to): polynomial algebra, invariant and coordinate-free methods, probabilistic, synthetic, and logic approaches, techniques for automated geometric reasoning from discrete mathematics, combinatorics, and numerics; symbolic and numeric methods for geometric computation, geometric constraint solving, automated generation/reasoning and manipulation with diagrams; design and implementation of geometry software, special-purpose tools, automated theorem provers, experimental studies; applications of ADG to mechanics, geometric modeling, CAGD/CAD, computer vision, robotics and education.

Submission: Potential participants of ADG 2002 are invited to submit an extended abstract of three or more pages or a full paper describing their work to be presented at ADG 2002. The submitted extended abstracts and full papers will be reviewed by members of the program committee (PC) for presentation at the workshop. Electronic submissions are preferred and should be sent to chairman: Prof. Dr. Franz Winkler, RISC-Linz, Johannes Kepler Universitaet, Linz, A-4040 Linz, Austria; e-mail: Franz.Winkler@risc.uni-linz.ac.at; phone: +43 (0)732 2468 9943; fax: +43 (0)732 2468 9930.

Important Dates: Deadline for extended abstract submission: June 3, 2002; notification of acceptance or rejection: July 3, 2002; workshop taking place: September 4-6, 2002; deadline for full paper submission: November 4, 2002.

Information: For an up-to-date version of the cfp, please check <http://www.risc.uni-linz.ac.at/conferences/adg2002/>.

4-7 International Conference on Dynamical Methods for Differential Equations, Medina del Campo, Valladolid, Spain. (Oct. 2001, p. 1051)

Description: The conference will focus on those recent advances in topological methods and ergodic theory which are relevant to the analysis of ordinary differential equations, partial differential equations and functional equations, as well as on their applications to science and technology.

Information: <http://wmatem.eis.uva.es/~dmde02/>.

***4-7 Stochastic Analysis and Related Topics**, Research Inst. for Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: Y. Takahashi, Research Institute for Mathematical Sciences, Kyoto Univ., Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto 606-8502, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

5 PIMS Numerical Analysis Potlatch 2002, University of Victoria, Victoria, British Columbia, Canada. (May 2002, p. 607)

Information: Contact: pims@pims.math.ca.

9-13 Axiomatic and Enriched Homotopy Theory, Isaac Newton Institute for Mathematical Sciences, Cambridge, England. (Apr. 2002, p. 503)

Workshop Organizers: P. G. Goerss and J. P. C. Greenlees.

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; e-mail: info@newton.cam.ac.uk. Please refer to our website, <http://www.newton.cam.ac.uk/programs/NST/>, for full details of how to apply for these workshops.

9-13 IMA Tutorial: Supply Chain and Logistics Optimization, Minneapolis, Minnesota.

Organizers: C. Barnhart (MIT), M. Juenger (Univ. zu Koeln), D. Simchi-Levi (MIT).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/fall/t1.html>.

9-21 Marrakech 2002 School on Delay Differential Equations and Applications, Marrakech, Morocco.

Topics: The school lasts two weeks. The first week starts with a historical perspective given by Prof. J. K. Hale about the motivations and the developments of functional differential equations. It then turns to general theory, with some emphasis on existence results, and first of all on the very notion of a delay or functional differential equation. Linear delay differential equations in finite as well as in infinite dimensions will be presented as well as fundamental results about spectral properties of such equations. The theory of semilinear d.d.e. will also be briefly recapitulated as a preparatory step for a detailed treatment of the Hopf bifurcation theorem, which will be presented both in finite and infinite dimensions. During the second week the emphasis is put on applications, with special attention to the geometry of delay equations. Some attention will also be given to control in delay systems, on delay in population dynamics, and on the effect of (random) "noise" on the dynamical properties of delay equations.

Information: <http://euromedbiomath.m2002.free.fr/>.

9-27 School and Conference on Intersection Theory and Moduli, The Abdus Salam International Centre for Theoretical Physics (ICTP), Strada Costiera 11, I-34014, Trieste, Italy. (Mar. 2002, p. 360)

Directors: E. Arbarello (Scuola Normale Superiore, Pisa, Italy), G. Ellingsrud (University of Oslo, Norway), L. Götsche (ICTP).

Local Organizer: L. Götsche.

Deadline: Deadline for requesting participation is April 15, 2002.

Information: Details available shortly from: <http://www.ictp.trieste.it/cgi-bin/ICTPsmr/mkhtml/smr2html.pl?smr1426/Announcement/>.

10-20 Advanced Course on Geometric 3-Manifolds, Bellaterra (Barcelona), Spain. (Jan. 2002, p. 58)

Coordinator: J. Porti.

Information: <http://www.crm.es/geom-mani/>.

11-13 EACA-2002, VIII Encuentro de Álgebra Computacional y Aplicacione, Palacio de Avellaneda, Peparanda de Duero, Spain.

Description: The main goal of this series of meetings on computer algebra and applications (EACA) is to provide a forum for researchers on computer algebra as well as for researchers who essentially use these techniques in their investigation. Originally, this was a Spanish forum, but it is not restricted to Spanish people. In the last EACA

events, many researchers from all over the world participated. The EACA-2002 is the eighth EACA meeting. As in the previous events of this series, the participation of young researchers is especially encouraged.

Organizer: P. Gimenez (pgimenez@agt.uva.es, Univ. of Valladolid).
Plenary Speakers: C. Andradas (Univ. Complutense, Madrid), B. Buchberger (RISC-Linz), J. Elias (Univ. Barcelona), I. Emiris (INRIA, Nice), A. Simis (Univ. F. Pernambuco, Recife), U. Walther (Purdue Univ.).

Deadlines: April 30: deadline for abstract submission; June 28: deadline for registration.

Information: <http://www.uva.es/eaca2002/>; e-mail: eaca2002@agt.uva.es.

* **11-13 The Structure of Operator Algebras and Its Applications**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: K.-S. Saito, Faculty of Science, Niigata Univ., 8050 Nino-cho, Ikarashi, Niigata 950-2181, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

11-18 NSEC8: Navier-Stokes Equations and Related Topics, Euler International Mathematical Institute, St. Petersburg, Russia. (Feb. 2002, p. 271)

Scope: The conference is focused on mathematical problems arising in the theory of viscous fluids, such as existence and uniqueness of solutions, differentiability properties of solutions, long-time behavior, and applications of the above topics to the analysis of contemporary problems in fluid mechanics.

Topics: Papers are solicited in all research areas related to mathematical problems in the theory of viscous fluids, including, but not limited to: compressible and incompressible Navier-Stokes equations; mathematical analysis of NS equations in bounded and unbounded domains; existence and regularity of solutions; stability and long-time behavior of solutions, asymptotical analysis; properties of solutions in domains with nonsmooth boundaries; inviscid fluids; mathematical modeling of fluids with complex rheology; models of non-Newtonian fluids; visco-plastic and visco-elastic fluids; fluids with complex rheology (electrorheological fluids, magnetorheological fluids, etc.); mathematical aspects of computational analysis; approximation methods for compressible and incompressible viscous flows; convergence of finite element, finite volume, finite difference, and spectral methods; a priori and a posteriori estimates of the accuracy of approximations.

Program Committee: O. Ladyzhenskaya (St. Petersburg) (chairman); H. Amann (Zurich); H. Beirao da Veiga (Pisa); C. Fefferman (Princeton); Y. Giga (Hokudai); M. Gunzburger (Iowa); R. Kohn (New York); V. Pukhnachev (Novosibirsk); G. Seregin (St. Petersburg); V. Solonnikov (St. Petersburg).

Information: URL: <http://www.pdmi.ras.ru/EIMI/2002/NSEC8/>; e-mail: nsec8@imi.ras.ru; fax: 7 (812) 3105377, 7 (812) 2345819.

13-14 (REVISED) Topics in Linear Algebra, Iowa State Univ., Ames, Iowa. (Oct. 2001, p. 1051; Jan. 2002, p. 58)

Sponsors: Inst. for Mathematics and its Applications, International Linear Algebra Society, and Iowa State Univ.

Organizers: L. Hogben (lhogben@iastate.edu), B. Cain (bcain@iastate.edu), L. DeAlba (luz.dealba@drake.edu), I. Hentzel (hentzel@iastate.edu), M. Mills (millsm@central.edu), Y. T. Poon (ytpoon@iastate.edu), H. Wu (isuhwu@iastate.edu).

Invited Speakers: S. Hedayat (ILAS Lecturer), Univ. of Illinois-Chicago; D. P. Jacobs, Clemson Univ.; C. R. Johnson, College of William and Mary; C. K. Li, College of William and Mary; H. Schneider, Univ. of Wisconsin-Madison.

Description: This conference will provide an opportunity for those working in several areas of linear algebra to meet, share ideas, and work together. The conference is organized around the following topics: matrix completion problems, numerical ranges,

matrix stability and convergence, applications of linear algebra to nonassociative algebra, statistical applications of linear algebra. For each topic there will be a presentation by an invited speaker, a session for contributed papers, and a work session. There will also be a contributed paper session for areas of linear algebra within the focus of the conference but not specifically within one of the topics. Speakers will have the opportunity to submit their papers for publication in a special issue of the *Electronic Journal of Linear Algebra* (ELA), "Proceedings of the Topics in Linear Algebra Conference". All papers will be refereed by ELA to its usual standards.

Call for Papers: Contributed talks of 20 minutes in length are invited. To contribute a talk, submit the title and abstract by May 1, 2002, to L. DeAlba (luz.dealba@drake.edu).

Information: <http://www.math.iastate.edu/lhogben/TLA/homepage.html>.

15–21 **Theory and Applications of Imaging**, Martina Franca (Taranto), Italy.

Scientific Direction: G. Papanicolau (Stanford Univ., USA, papanico@georgep.stanford.edu); G. Talenti (Univ. di Firenze, Italy, talenti@math.unifi.it).

Courses: Array imaging in noisy environments, G. Papanicolau (Stanford Univ., USA); Tomographic imaging, F. Natterer (Univ. of Munster, Germany); Diffuse imaging for medical diagnoses, S. R. Arridge, (Univ. College, London, UK); Experimental methods and results in laser-tissue imaging, R. R. Alfano (Inst. for Ultrafast Spectroscopy and Lasers, CUNY, New York); Seismic imaging, W. W. Simes (Rice Univ., USA).

Information: For any further information contact: Fondazione C.I.M.E. c/o Dipartimento di Matematica "U. Dini", Viale Morgagni, 67/A - 50134 Firenze, Italy; Tel. +39-55-434975/ +39-55-4237123; fax +39-55-434975 / +39-55-4222695; <http://www.math.unifi.it/cime/>.

15–22 **International Summer School on Operator Methods for Evolution Equations and Approximation Problems (OMEAP 2002)**, Hotel Villaggio Cala Corvino, Monopoli, Bari, Italy.

Aim: The school is especially addressed to Ph.D. students and young researchers. A poster session in which the youngest researchers can outline their research work and interests will also be arranged.

Topics: Feller semigroups and Markov processes, positive operators and approximation of functions, positive operators and approximation for evolution equations, semigroups of operators and evolution equations, cosine families of operators and evolution equations.

Invited Speakers of the Courses: J. van Casteren (Univ. of Antwerp), H. H. Gonska (Univ. of Duisburg), J. Prüss (Univ. of Halle-Wittenberg), I. Raşa (Technical Univ. of Cluj-Napoca), Sen-Yen Shaw (National Central Univ. of Chung-li).

Invited Lecturers: J. A. Adell (Univ. of Zaragoza), D.-H. Mache (Univ. of Dortmund), Giuseppe Mastroianni (Univ. of Basilicata), A. Rhandi (Univ. of Marrakech), V. Vespri (Univ. of Firenze).

Executive Organizing Committee: F. Altomare (altomare@dm.uniba.it), A. Attalienti (attalienti@matfin.uniba.it), M. Campiti (campiti@dm.uniba.it), L. D. Ambrosio (dambros@dm.uniba.it), S. Diomedè (s.diomedè@dm.uniba.it), G. Metafune (Giorgio.Metafune@le.infn.it), D. Pallara (Diego.Pallara@le.infn.it).

Grants: In order to foster the participation of young researchers, some scholarships for attendance (as widely as possible) will likely be available. Applications for scholarships must be sent to F. Altomare, Dipartimento di Matematica Dell Univ. e del Politecnico di Bar Campus Univ., Via E. Orabona, 4, 70125 Bari, Italy (altomare@dm.uniba.it, telefax number: +39-080-5963612) no later than May 31; the applicants must also include a short curriculum vitae and a letter of recommendation.

Deadline for Registration: May 31; no registration fee is required.

Information: Contact one of the executive organizers or visit the website <http://www.dm.uniba.it/documenti/formazione/>

[SummerSchool-OMEAP2002/index.htm](http://www.math.iastate.edu/lhogben/TLA/homepage.html).

16–18 **KES'2002 Sixth International Conference on Knowledge-Based Intelligent Information & Engineering Systems**, Podere d'Ombriano, Crema, Italy. (Apr. 2002, p. 503)

Topics: Special session: Machine learning in bioinformatics, <http://www.dsi.unifi.it/~paolo/kes02.html>. This special session aims to present and discuss state-of-the-art algorithms and methodologies in computational molecular biology where machine learning plays a key role. Topics of interest include (but are not limited to) applications of machine learning to: protein folding and protein structure prediction; gene expression data and DNA micro-arrays; protein-protein interaction; finding signals and motifs in DNA sequences; inference of genetic networks; analysis of gene structure and regulation; phylogenetic analysis; QSAR and QSPR.

Information: P. Frascioni, Dept. of Systems and Computer Science, University of Florence, Via di Santa Marta 3, I-50139 Firenze, Italy; phone: +39 055 4796 362; fax: +39 055 4796 363; <http://www.dsi.unifi.it/~paolo/>.

16–20 **Homotopy Theory of Geometric Categories**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England. (Apr. 2002, p. 503)

Workshop Organizers: J. F. Jardine and F. Morel.

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; e-mail: info@newton.cam.ac.uk. Please refer to our website, <http://www.newton.cam.ac.uk/programs/NST/>, for full details of how to apply for these workshops.

16–20 **LMS/EPSC Short Course on Differential Geometry, Homogeneous Spaces and Integrable Systems**, University of Durham, United Kingdom.

Description: The instructional course is aimed at research students, both beginning and more advanced. It is funded by the London Mathematical Society and the Engineering and Physical Sciences Research Council (UK). The course consists of three lecture series.

Lecture Series: M. Micalef (Warwick), Introduction to Differential Geometry; D. Alekseevsky (Hull), Lie Groups and Homogeneous Spaces; M. Guest (Tokyo), Geometry and Integrable Systems.

Registration Deadline: July 5, 2002.

Organizers: J. Berndt (Hull), J. Bolton (Durham).

Contacts: j.berndt@hull.ac.uk, john.bolton@durham.ac.uk.

Information: <http://www.hull.ac.uk/LMS-DG/>.

* 16–December 13 **Mathematics in Nanoscale Science and Engineering**, Insitute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nano2002/>.

* 17–19 **Nonlinear Analysis and Convex Analysis**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: T. Nishishiraho, Faculty of Science, Univ. of the Ryukyus, 1, Senbaru, Nishiharacho, Nakagami-gun, Okinawa 903-0213, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

* 17–19 **Viscosity Solutions of Differential Equations and Related Topics**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: H. Ishii, School of Education, Waseda Univ., 1-6-1, Nishi-Waseda, Shinjuku-ku, Tokyo 169-8050, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

17–23 **International Algebra Conference Dedicated to the Memory of Zenon Borewicz (1922–1995)**, Saint Petersburg, Russia. (Apr. 2002, p. 503)

Topics: The conference will cover all areas of algebra, algebraic number theory and algebraic geometry, with special emphasis in topics close to the research interests of Borewicz, viz. local and global fields, representation theory, homological algebra and algebraic K -theory, linear and algebraic groups. We plan both plenary talks and short communications in smaller thematic sections.

Information: If you are interested in participating in the conference and would like to receive further information, please respond to Borevich.conf@norths.spb.su.

20-21 **AD-HOC NetwOrks and Wireless (ADHOC-NOW)**, The Fields Institute, Toronto, Ontario, Canada. (May 2002, p. 607)

Scope: We are interested in work in progress, experimental and theoretical research in Ad-Hoc, Mobile and Wireless Networks.

Program Co-chairs: M. Barbeau and E. Kranakis, Carleton University, School of Computer Science, Ottawa, Ontario K1S 5B6, Canada.

Information: For more information see website <http://www.scs.carleton.ca/%7Eadhocnow/>.

20-22 (REVISED) **Conference on the Hilbert-Smith Conjecture and Its Proof**, Istanbul Bilgi University, Istanbul, Turkey.

Description: There will be a limited number of short talks, 20-30 min. Those wishing to speak should send their requests and abstracts to either L. F. McAuley at louis@math.binghamton.edu or louis@bilgi.edu.tr or to A. Ratiu at ratiu@bilgi.edu.tr.

Some of the Principal Speakers Are: A. Borel, A. V. Chernavsky, D. Repovs, S. Illman, L. F. McAuley.

20-22 **Yamabe Memorial Symposium**, University of Minnesota, School of Mathematics, Minneapolis, Minnesota. (Apr. 2002, p. 503)

Description: The Yamabe Memorial Symposium is held in memory of Hidehiko Yamabe (1923-1960), whose significant work on topological groups and geometry were outstanding contributions to modern mathematics.

Main Speakers: P. Li, R. Hamilton, F.-H. Lin, and B. Chow.

Organizing Committee: R. Gulliver, D. Kahn, N.-C. C. Leung, J. Wang.

Financial Support: Interested younger participants are invited to apply for partial support for travel and local expenses. Please supply a brief research summary or C.V. and a letter of reference.

Information: E-mail: yamabe@math.umn.edu, tel: (612) 625-5591. The final list of speakers and other conference details will be posted at <http://www.math.umn.edu/~gulliver/confs/yamabe.html>.

20-25 **International Conference on Computational and Math. Methods in Science and Engineering (CMMSE 2002)**, Alicante, Spain. (Oct. 2001, p. 1051)

Topics: Celestial mechanics, computational chemistry & physics, computational engineering, computational mathematics, computational statistics, high performance computing, industrial mathematics, mathematical economics & finance, mathematical models for the information society.

Sponsors: Univ. de Alicante, and the Center for Industrial Mathematics, Univ. of Wisconsin-Milwaukee.

Program: The conference aims to act as a unifying, cross-cutting, interdisciplinary catalyst where specialists can have exposure to others' fields as well as participate in special sessions at the forefront of their own specialties. The program consists of 1-hour plenary lectures that highlight major accomplishments, trends, and technical challenges in scientific computing in selected fields of research, special sessions with 25-minute invited talks, and a poster session.

Call for Papers: Researchers are invited to propose special sessions to the general chairs or submit papers for 25-minute talks or the poster session.

Important Dates: December 15, 2001: Declaration of participation and submission of abstract of minimum three A4 pages in standard LaTeX; January 30, 2002: Notice of acceptance, early registration begins; March 1, 2002: End of early registration, standard registration begins; June 15, 2002: Full paper submission; maximum ten

A4 pages in standard LaTeX; July 30, 2002: Confirmation, program is set; September 20-25, 2002: Conference (9/22 is a free day).

Information: <http://www.ua.es/cmmse2002/> or <http://www.uwm.edu/Dept/CIM/>.

*21-28 **Random Matrix Theory with Various Applications**, Grand Hotel Bellavista, Levico Terme, Italy.

Description: Random matrix theory has been initiated by Wigner to model energy levels of certain quantum mechanical systems. After his work, random matrices have proven to be useful in many fields. This school gives an introduction to the main random matrix ensembles in the form in several intensive courses.

Main Lecturers: F. Hiai, B. Khoruzhenko, D. Petz, and S. Thorbjornsen.

Deadline: July 15, 2002.

Information: <http://www.math.bme.hu/~petz/rmatrix.html>; the application form can be downloaded from there. The participation fee is 500 EUR, but some grants are available for young and talented participants.

23-26 **8th European Conference on Logics in Artificial Intelligence: Jelias'02**, Cosenza, Italy.

Aim and Scope: The aim is to bring together active researchers interested in all aspects concerning the use of logics in artificial intelligence to discuss current research, results, and problems and applications of both a theoretical and practical nature. Moreover, Jelias strives to foster links and facilitate cross-fertilization of ideas among researchers from various disciplines; among researchers from academia, industry and government; and between theoreticians and practitioners.

Invited Speakers: M. Gelfond (Texas Tech Univ., USA), G. Gottlob (Vienna Univ. of Technology, Austria), M. Vardi (Rice Univ., USA), K. Apt (CWI National Res. Inst. for Math. and Comput. Sci. in the Netherlands).

Tutorials: V. S. Subrahmanian (Univ. of Maryland, USA): Logic-based agents; D. Pedreschi and F. Giannotti (Univ. of Pisa, Italy): Logics and data mining; G. Pfeifer (Vienna Univ. of Tech., Austria): Answer set programming.

Information: <http://www.unical.it/jelias/>.

*23-27 **First International Course of Mathematical Analysis in Andalusia**, Dept. of Math., Univ. of Cádiz, Cádiz, Spain.

Topics: Banach algebras, operator theory, Banach spaces, nonlinear analysis.

Organizers: Dept. of Math., Univ. of Cádiz.

Speakers: J. L. González-Llavona, M. González-Ortiz, S. Reich.

Information: <http://www2.uca.es/dept/matematicas/curso/>; e-mail: cursos.andalusia@uca.es.

23-27 **IMA Workshop 1: The Role of Optimization in Supply Chain Management**, Minneapolis, Minnesota.

Organizers: B. Dietrich (IBM), G. Nemhauser (GATech), D. Simchi-Levi (MIT).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/fall/op1.html>.

23-27 **Ramification in Arithmetic and Geometry**, Institut Galilée, Université Paris 13, France. (Oct. 2001, p. 1051)

Organizers: A. Abbes (Paris), B. Erez (Bordeaux), T. Saito (Tokyo).

Information: <http://www-math.math.univ-paris13.fr/~ramifica/>.

23-28 **Workshop on Categorical Structures for Descent and Galois Theory, Hopf Algebras and Semiabelian Categories**, The Fields Inst. for Research in Math. Sciences, Toronto, Canada. (Dec. 2001, p. 1368)

Description: The goal of the meeting is to spread and to advance categorical methods and their application amongst researchers

working in three overlapping areas of algebra, namely in the study of: (i) algebraic structures in monoidal categories and their classical examples, such as Hopf, Frobenius, and Azumaya algebras, and others, particularly those occurring in quantum field theory; (ii) Galois theory vis-a-vis Grothendieck's descent theory, as well as the general theory of separability and decidability, applied particularly to the structures mentioned in (i); (iii) homological algebra of nonabelian structures, such as groups, rings and (associative or Lie) algebras, and its extension to the structures mentioned in (i).

Organizers: G. Janelidze, B. Pareigis, W. Tholen.

Information: http://www.fields.utoronto.ca/programs/scientific/02-03/galois_and_hopf/ or contact tholen@mathstat.yorku.ca.

23–October 4 **The Calculemus Autumn School**, Pisa, Italy.

Objectives: The main objectives of the Calculemus Autumn School are: to give young researchers a perspective on the state-of-the-art in symbolic computation and symbolic reasoning; to disseminate advanced scientific knowledge on the integration of computer algebra systems and deduction systems; to foster contacts between the research communities of computer algebra, deduction, math education, and industry. The participants will be trained both theoretically as well as experimentally on selected tools.

Courses and Schedule: For the list of courses and the preliminary schedule visit: <http://www.eurice.de/calculumus/autumn-school/courses2.html> and <http://www.eurice.de/calculumus/autumn-school/timetable.pdf/>.

Registration: Registration deadline is July 1, 2002.

Contact: E-mail: calculumus-autumn-school@eurice.de.

Information: Please visit our webpage for further information on the event: <http://www.eurice.de/calculumus-school/>.

* 24–26 **Algebraic Systems, Formal Languages and Conventional and Nonconventional Computation Theory**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: M. Ito, Faculty of Science, Kyoto Sangyo Univ., Motoyama, Kamigamo, Kita-ku, Kyoto, 603-8555, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

24–27 **Symposium on Informatics and Telecommunications**, Sevilla, Spain.

Organizer: Organized under the auspices of DINTEL (<http://www.fundacion-dintel.org>).

Description: SIT'02 is the Spanish Symposium on Informatics and Telecommunications. It is not a pure scientific meeting, but a mixed gathering where people from industry and academia are expected to exchange ideas and experiences and foster lively discussions on topics ranging from pervasive computing to real-time distributed systems or security concerns.

Information: <http://tdg.lsi.us.es/~sit02/>.

25–28 **International Conference on Computer Geometry: Information Geometry, Foundation of Computer Science, Erdős-Diophantine Graphs**, Plovdiv Universitym-Filial Smolyan, Smolyan, Bulgaria. (Mar. 2002, p. 360)

Conference Topics and Purpose: Bringing together specialists in information geometry, foundations of computer science and Erdős-diophantine graphs for stimulating cross-disciplinary activities.

Registration Fee: US\$85. Accommodations and meals: no more than US\$30 per day.

Scientific Program Committee: Tsukuba University (Japan): T. Kawaguchi (Chairman), R. Ivanova, S. Igarashi, T. Ida, M. Sato; Plovdiv University (Bulgaria): D. Mekеров (Dean), G. Zlatanov, K. Gribachev, E. Pavlov, A. Rahnev; Sofia University (Bulgaria): Gr. Stanilov, B. Shishkov; local organizing committee: S. Dimiev (Chairman), A. Rahnev, R. Ivanova, M. Manev, D. Frenkev, S. Ludneva.

* 30–October 2 **Mathematical Aspects of Quantum Field Theory and Applications**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: M. Abe, Research Institute for Mathematical Sciences, Kyoto Univ., Oiwake-cho, Kitashirakawa, Sakyo-ku, Kyoto, 606-8502, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

30–October 4 **DIMACS Workshop on Geometric Graph Theory**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Sponsors: DIMACS Center.

Organizers: J. Pach, NYU, Courant Institute.

Deadline for Submissions: May 15, 2002.

Contacts: J. Pach, pach@cims.nyu.edu.

Local Arrangements: J. Herold, DIMACS Center, jessicah@dimacs.rutgers.edu; tel: 732-445-5928.

Information: Visit <http://dimacs.rutgers.edu/Workshops/GeometricGraph/>.

30–October 4 **K-Theory and Arithmetic**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England. (Apr. 2002, p. 504)

Workshop Organizers: S. Lichtenbaum and V. P. Snaith.

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; e-mail: info@newton.cam.ac.uk. Please refer to our website, <http://www.newton.cam.ac.uk/programs/NST/>, for full details of how to apply for these workshops.

* 30–October 4 **Mathematics in Nanoscale Science and Engineering Workshop I: Alternative Computing**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nanoalt/>.

October 2002

4–5 **Ninth Midwest History of Mathematics Conference and 30th Annual Miami University Mathematics and Statistics Conference**, Miami University, Oxford, Ohio.

Theme and Call for Papers: The program will focus on the history of mathematics in America. Authors wishing to contribute a 15-minute paper consistent with this theme should submit an abstract by September 1, 2002.

Invited Speakers: K. H. Parshall (Univ. of Virginia) and D. Zitarelli (Temple Univ.).

Information: The conference director is D. E. Kullman (Miami Univ.), kullmade@muohio.edu. Abstracts of contributed papers and requests for information should be sent to: History of Mathematics Conference, Dept. of Math. and Stat., Miami Univ., Oxford, Ohio 45056; tel: 513-529-5818; fax: 513-529-1493; website: <http://unixgen.muohio.edu/~MathStat/>. Conference programs with information about registration and housing will be available after August 1.

4–5 **SIAM Symposium on Computational Models and Simulation for Intra-cellular Processes**, Hilton Garden Inn, Washington, DC. (May 2002, p. 608)

Description: The interaction between the mathematical and computational sciences and biology has been growing in importance in the last decade, but it is still a beginning. There is tremendous room for progress. For example, major advances are needed in mathematical and statistical methods to have significant impact on the prediction and control of spatio-temporal cellular behavior. Some specific processes that are amenable to mathematical methods are networks of molecular interactions such as gene-gene, gene-protein, and protein-protein. Applications of such interactions include discovery of functional modules in cellular systems, and rapid and precise identification of targets and design of intervention methods that influence molecular dynamics.

Information: Contact: meetings@siam.org.

5-6 AMSE Eastern Section Meeting, Northeastern University, Boston, Massachusetts.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

6-11 Quantum Control: Mathematical and Numerical Challenges, Centre de Recherches Mathématiques, Montréal, Canada.

Topic: This conference will concentrate on advanced numerical methods and new mathematical tools for control and optimization in the quantum control of matter at the molecular level using current advanced laser technology.

Organizers: A. Bandrauk (Sherbrooke, Canada), M. Delfour (Montreal, Canada), C. Le Bris (ENPC, Paris, France).

Information: Conference website: <http://omega.CRM.UMontreal.CA/QuantumC/>.

* **7-9 DIMACS Workshop on Signal Processing for Wireless Transmission**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Short Description: In contrast to the voiceband telephone channel, the wireless channel suffers from interference from other users and from fading due to destructive addition due to multipath propagation. The aim of this workshop is to explore the ultimate limits that information theory puts on spectral efficiency, as well as the best means of striving toward that efficiency. Multiuser detection and "Dirty Paper Coding" are among the key signal processing countermeasures that promise substantial improvements over existing systems. This workshop will investigate such approaches from both a link and network level perspective. The enhancements from multiple antennas will also be explored, including means of space-time coding.

Sponsors: DIMACS Center.

Organizers: S. Verdu, Princeton University, verdu@princeton.edu; J. Foschini, Bell Labs, gjf@research.bell-labs.com.

Early Registration Deadline: October 1, 2002.

Local Arrangements: J. Thiemann, DIMACS Center, jennifer@dimacs.rutgers.edu; tel: 732-445-5928.

Information: <http://dimacs.rutgers.edu/Workshops/Wireless/>

* **7-10 Microlocal Analysis and Asymptotic Analysis of Systems of Equations**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: K. Kataoka, Graduate School of Mathematical Sciences, The Univ. of Tokyo, 3-8-1, Komaba, Meguro-ku, Tokyo 153-8914, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

* **9-11 Problems and Applications in General and Geometric Topology**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: T. Kimura, Faculty of Education, Saitama Univ., 255, Shimo-Okubo, Saitama, 338-8570, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

* **9-11 Studies in Relative Consistency Proofs with Particular Emphasis on Set Theoretic Methods**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: T. Miyamoto, Math. Dept., Nanzan Univ., 27 Seirei-cho, Seto City, Aichi 489-0863, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

9-11 The 7th Conference "Shell Structures. Theory and Applications" (SSTA2002), Gdansk, Poland. (Jan. 2002, p. 58)

Information: <http://www.pg.gda.pl/ssta2002/>. For additional information please contact Conference Secretary (ssta2002@pg.gda.pl).

12-13 AMS Central Section Meeting, University of Wisconsin-Madison, Madison, Wisconsin.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

14-19 IMA Workshop 2: Computational Methods for Large Scale Integer Programs, Minneapolis, Minnesota.

Sponsors: Jointly sponsored by the Centre de Recherches Mathématiques.

Organizers: W. Cook (Princeton), M. W. P. Savelsbergh (GATech), G. Nemhauser (GATech).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; Phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/fall/op2.html>.

* **14-20 Perspectives in Classification and Moduli Theory: A Conference in Algebraic Geometry**, Scuola Normale Superiore, Cortona, Italy.

Sponsors: INDAM, Cofin, MIUR, MIT.

Scientific Committee: L. Caporaso, A. Lopez, M. Manetti.

Preliminary List of Speakers: D. Abramovich, F. Andreatta, M. Andreatta, L. Bonavero, F. Catanese, L. Chiantini, A. Corti, O. Debarre, L. Ein, C. Faber, W. Fulton*, E. Getzler*, M. Mella, L. Migliorini, M. Mustata, K. O'Grady, G. Pacienza, P. Pirola, N. Shepherd-Barron, K. Smith*, S. Verra, E. Viehweg, A. Vistoli, J. Włodarczyk, F. Zak (* means "to be confirmed").

Information: <http://www.mat.uniroma3.it/cortonaPCMT/>; e-mail: cortona@mat.uniroma3.it.

* **15-17 Analysis of Inverse Problems and Its Related Topics**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: Y. Iso, Graduate School of Informatics, Kyoto Univ., Honmachi, Yoshida, Sakyo-ku, Kyoto, 606-8501, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

* **16-18 New Developments in Evolution Equations and Approaches to Nonlinear Phenomena**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizers: S. Oharu, Dept. of Math., Chuo Univ., 1-13-27, Kasuga, Bunkyo-ku, Tokyo 112-8551, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

* **18-19 Second Prairie Analysis Seminar**, University of Kansas, Lawrence, Kansas.

Organizers: E. A. Gavosto (Univ. of Kansas), M. Korten (Kansas State Univ.), C. Moore (Kansas State Univ.), R. H. Torres (Univ. of Kansas).

Principal Lecturer: D. Tataru (UC Berkeley).

Invited Speakers: C. Muscalu (UCLA) and W. Schlag (CalTech).

Information: There will be time allocated for short contributed talks. For more information see <http://www.math.ukans.edu/conferences/prairie/>, or write to R. Torres, e-mail: torres@math.ukans.edu.

18-19 The 24th Midwest Probability Colloquium, Northwestern University, Evanston, Illinois.

Workshops: On Thursday, October 17, there will be a workshop on related topics including talks by Y. Peres (Berkeley) and B. Virag (MIT). Topics include stochastic Lowener evolution with applications, percolation on trees, discrete lattice processes, and scaling limits in higher dimensions.

Main Speaker: O. Schramm (Microsoft), together with A. Dembo (Stanford) and F. Rezhankalou (Berkeley).

Organizing Committee: C. Mueller, E. Kosygina, and S. Sethuraman.

Information: Contact M. Pinsky (pinsky@math.nwu.edu).

*21–23 **Mathematics in Nanoscale Science and Engineering Workshop II: Joint IPAM/MSRI Workshop on Quantum Computing**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nanoquant/>

*21–24 **WSEAS International Conferences**, Rio de Janeiro, Brazil.

Conferences: System Science (ICOSYS 2002), Applied Mathematics and Computer Science (AMCOS 2002), Power Engineering Systems (ICOPES 2002).

Types of Submission Accepted: Papers, Special Sessions, Tutorials, Workshops, Panel Discussions. All submissions are to be done electronically. The submission pages as well as other conference details can be found at: <http://www.wseas.com/conferences/2002/brazil/icosys/> (ICOSYS 2002), <http://www.wseas.com/conferences/2002/brazil/amcos/> (AMCOS 2002), <http://www.wseas.com/conferences/2002/brazil/icopes/> (ICOPES 2002).

Information: P. Ekel, Pontifical Catholic University of Minas Gerais, Av. Dom Jose Gaspar, 500, 30.535-610, Belo Horizonte, MG, Brazil; tel: +55031-3319-4305; Fax: 55-31-3319-4225.

*21–25 **Diophantine Problems and Analytic Number Theory**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: N. Hirata-Kohno, Dept. of Math., College of Sci. and Tech., Nihon Univ., 1-8, Surugadai, Kanda, Chiyoda-ku, Tokyo 101-8308, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

*23–25 **Mathematical Aspects and Applications of Nonlinear Wave Phenomena**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: T. Yoshinaga, Dept. of Math. Sci., Osaka Univ., 1-3, Machikaneyama-cho, Toyonaka City, Osaka 560-8531, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

24–25 **DIMACS Workshop on Visualization and Data Mining**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Sponsors: DIMACS Center.

Organizers: E. Gansner, AT&T; M. Goodrich, Univ. of California-Irvine; C. Silva, AT&T; R. Tamassia, Brown Univ.

Contacts: E. Gansner, erg@research.att.com; M. Goodrich, goodrich@ics.uci.edu; C. Silva, csilva@research.att.com; R. Tamassia, rt@cs.brown.edu.

Local Arrangements: J. Thiemann, DIMACS Center, jennifer@dimacs.rutgers.edu; tel: 732-445-5928.

Information: See <http://dimacs.rutgers.edu/Workshops/VisDataMining/>.

25–27 **2002 Conference on Applied Mathematics (CAM 2002)**, University of Central Oklahoma, Edmond, Oklahoma.

Topics: The conference will feature special sessions in error-correcting codes and wavelets and signal processing.

Speakers: Keynote speakers will be N. Sloane (AT&T Shannon Labs) and V. Wickerhauser (Washington Univ.-St. Louis).

Conference Organizers: J. Byrne, 100 N. University Drive, Edmond, OK 73034; jbyrne@ucok.edu; tel: (405) 974-5575; and C. Simmons, 100 N. University Drive, Edmond, OK 73034; cksimmons@ucok.edu; tel: (405) 974-5316.

Information and Deadlines: Papers are invited for contributed paper sessions, including a session for undergraduate and graduate student talks. Those interested in presenting may send an abstract

and minivitaes to the organizers by August 2. Grant proposals to provide travel support for a limited number of participants are pending with NSA and NSF. For more information, please visit the conference website at <http://www.math.ucok.edu/>.

26–27 **AMS Western Section Meeting**, University of Utah, Salt Lake City, Utah.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

27–29 **King Fahd University of Petroleum and Minerals**, Dhahran, Saudi Arabia. (Mar. 2002, p. 360)

Workshop: For a workshop at KFUPM in related fields, contact W. S. Al-Sabah, organizing committee chairman, e-mail: w.alid@kfupm.edu.sa; or visit <http://users.kfupm.edu.sa/imath/>.

Description: Papers will include the following topics and related areas: Analysis on fractals, differential equations on fractals, interconnection between wavelet and fractals, wavelets and differential equations, wavelets and optimization, wavelets and image processing, theoretical aspects as well as real-life applications.

Speakers: U. Mosco (Rome), W. Freeden (Kaiserslautern), and S. Dahlke (Bremen) are guest technical editors. G. Korvin is the editor. The editorial committee invites papers for this issue.

Information: Detailed information can be obtained from A. H. Siddiqi, Dept. of Math. Sci., KFUPM, P.O. Box 1745, Dhahran 31261, Saudi Arabia; e-mail: ahasan@kfupm.edu.sa; tel: 00966-3-860-4548 (office), 00966-3-860-5239 (residence); fax: 00966-3-860-2340 (office); website: <http://www.kfupm.edu.sa/webmath/ahasan.htm>. Technical details may be obtained by visiting the KFUPM website, <http://www.kfupm.edu.sa/> (main menu: Newsletters). The deadline for submission of papers is September 30, 2002.

*28–31 **PECS-IV: International Workshop on Photonic and Electromagnetic Crystal Structures**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/pecs-iv/>.

*28–November 1 **International Conference on the Spectrum of Differential Operators and Inverse Problems**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: H. Isozaki, Graduate School of Science, Tokyo Metropolitan Univ., 1-1, Minami-Osawa, Hachioji City, Tokyo 192-0397, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

30–31 **4th Workshop on Geometric and Topological Methods in Concurrency Theory and Distributed Systems Theory (GETCO 2002)—A Satellite Workshop to DISC 2002**, ENSEEIHT, Toulouse, France.

Topics: Algorithmics for Concurrent or Distributed Systems, Semantics, Concurrency Theory, Model-Checking, Abstract Interpretation, Fault-Tolerant Protocols for Distributed Systems, Geometrical/Topological Models, Applications of Algebraic Topology, Category Theory, etc.

Deadline for Submission of Papers: July 19, 2002.

Program Committee: E. Goubault, Paris; M. Herlihy, Brown; M. Raussen, Aalborg.

Local Organization: E. Goubault.

Information: <http://www.di.ens.fr/~goubault/getco02cfp.html> and <http://www.enseeiht.fr/~disc02/>.

*30–November 1 **Mathematical Aspects of Complex Fluids III**, Research Inst. of Math. Sci., Kyoto Univ., Kyoto, Japan.

Organizer: O. Sano, Faculty of Tech., Tokyo Univ. of Agriculture and Technology, 2-24-16, Naka-cho, Koganei City, Tokyo 184-8588, Japan.

Information: For information on the workshops at the Research Institute for Mathematical Sciences, see <http://www.kurims.kyoto-u.ac.jp/workshop-e.html>.

*31–November 1 **Conference in Honor of Emeritus Regents' Professor Lawrence Markus's 80th Birthday**, School of Mathematics, University of Minnesota, Minneapolis, Minnesota.

Chair: J. Serrin (Minneapolis).

Keynote Speaker: C. Zeeman (Oxford and Warwick, England).

Speakers: N. Everitt (Birmingham, England), B. Lee (Minneapolis), W. Littman (Minneapolis), J. Mallet-Paret (Providence), K. Meyer (Cincinnati), G. Sell (Minneapolis).

Information: e-mail: swedell@math.umn.edu or <http://www@math.umn.edu/>.

November 2002

2–3 **PIMS Cascade Topology Conference**, University of British Columbia, Vancouver, British Columbia, Canada. (May 2002, p. 608)

Information: Contact: pims@pims.math.ca.

*4–7 **Mathematics in Nanoscale Science and Engineering Workshop III: Data Analysis and Imaging**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nanodata/>.

8–10 (REVISED) **Conference to Celebrate the 70th Birthday of Professor Avner Friedman**, University of Minnesota, School of Mathematics, Minneapolis, Minnesota.

Speakers: D. Kinderlehrer (Carnegie Mellon), M. Gurtin (Carnegie Mellon), B. Pulleyblank (IBM), G. Papanicolaou (Stanford), H. Matano (Univ. of Tokyo), B. Peletier (Leiden Univ.), R. Brualdi (Univ. of Wisconsin), D. James (Univ. of Minnesota), M. Steele (Univ. of Pennsylvania), G. McDonald (General Motors), N. Kopell (Boston Univ.), J. Guckenheimer (Cornell), K. H. Hoffman (Center for Advanced European Studies & Research, Bonn), W. Newman (UCLA).
Organizing Committee: N. Krylov, W. Littman, F. Reitich (chair), F. Santosa.

Information: Email: dept@math.umn.edu; tel: (612) 625-5591. The final list of speakers and other conference details will be posted on the department's website at <http://www.math.umn.edu/>.

9–10 **AMS Southeastern Section Meeting**, University of Central Florida, Orlando, Florida.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

11–15 **IMA Workshop 3: Travel and Transportation**, Minneapolis, Minnesota.

Organizers: R. Anbil (Caleb Tech.), C. Barnhart (MIT), E. Johnson (GATech), W. R. Pulleyblank (IBM).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/fall/op3.html>.

14–15 **DIMACS Workshop on Computational Geometry**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Sponsors: DIMACS Center.

Organizers: J. S. B. Mitchell, SUNY at Stony Brook.

Deadline for Submissions: October 11, 2002.

Contacts: J. S. B. Mitchell, jsbm@ams.sunysb.edu.

Local Arrangements: J. Herold, DIMACS Center, jessicah@dimacs.rutgers.edu; tel: 732-445-5928.

Information: <http://dimacs.rutgers.edu/Workshops/CompGeom/>

18–22 **International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'02); 9th International Conference on Neural Information Processing (ICONIP'02); 4th Asia-Pacific Conference on Simulated Evolution and Learning (SEAL'02)**, Orchid Country Club, Singapore.

Information: <http://www.ntu.edu.sg/home/nef/>. Please visit the conference homepage or contact: L. Wang, ICONIP'02-SEAL'02-FSKD'02 General Chair, School of Electrical and Electronic En-

gineering, Nanyang Technological Univ., Block S2, 50 Nanyang Avenue, Singapore 639798; e-mail: e1pwang@ntu.edu.sg; phone: +65 6790 6372.

18–22 **Twenty Years of Tilting Theory: An Interdisciplinary Symposium**, Fraueninsel, Germany. (Apr. 2002, p. 504)

Description: Tilting modules were born about twenty years ago in the context of finite dimensional algebras. Since then, tilting theory has spread in many different directions, and nowadays it plays an important role in various branches of modern algebra, ranging from Lie theory and algebraic geometry to homotopical algebra. The aim of this meeting is to bring together for the first time experts from different fields where tilting is relevant or even of central importance. There will be several lecture series and survey talks on the use of tilting theory in different contexts, as well as a number of additional talks contributed by the participants.

Tentative List of Invited Speakers: M. van den Bergh (Univ. of Limburg), S. Brenner (Univ. of Liverpool), T. Brüstle (Univ. of Bielefeld), M. Butler (Univ. of Liverpool), S. Donkin (Univ. of London), K. Erdmann (Univ. of Oxford), K. Fuller (Univ. of Iowa), B. Keller (Univ. of Paris VII), S. König (Univ. of Leicester), H. Lenzing (Univ. of Paderborn), O. Mathieu (Univ. of Lyon), J. Miyachi (Tokyo Gakugei Univ.), I. Reiten (NTNU Trondheim), J. Rickard (Univ. of Bristol), R. Rouquier (Univ. of Paris VII), J. Trlifaj (Charles Univ. Prague).

Information: See <http://www.mathematik.uni-muenchen.de/~tilting/>.

*19–22 **Mathematics in Nanoscale Science and Engineering Workshop IV: Modeling and Simulation for Materials**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nanomod/>.

*21–22 **DIMACS/RECOMB Satellite Workshop on Computational Methods for SNPs and Haplotype Inference**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Description: The ability to score large numbers of DNA variants (SNPs) in large samples of humans is rapidly accelerating, as is the demand to apply these data to tests of association with diseased states. The problem suffers from excessive dimensionality, so any means of reducing the number of dimensions to the space of genotype classes in a biologically meaningful way would likely be of benefit. Linked SNPs are often statistically associated with one another (in "linkage disequilibrium"), and the number of distinct configurations of multiple tightly linked SNPs in a sample is often far lower than one would expect from independent sampling. These joint configurations, or haplotypes, might be a more biologically meaningful unit, since they represent sets of SNPs that co-occur in a population. Recently there has been much excitement over the idea that such haplotypes occur as blocks across the genome, as these blocks suggest that fewer distinct SNPs need to be scored to capture the information about genotype identity. There is need for formal analysis of this dimension reduction problem, for formal treatment of the hierarchical structure of haplotypes, and for consideration of the utility of these approaches toward meeting the end goal of finding genetic variants associated with complex disease.

Organizers: A. G. Clark, Cornell University and Celera, Andy.Clark@celera.com; S. Istrail, Celera, Sorin, Istrail@celera.com; M. Waterman, Univ. of Southern California and Celera, msw@hto.usc.edu.

Local Arrangements: J. Thiemann, DIMACS Center, jennifer@dimacs.rutgers.edu, 732-445-5928.

Information: <http://dimacs.rutgers.edu/Workshops/SNP/>.

25–28 **Fifth International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing (MCQMC 2002)**, Singapore, Republic of Singapore. (Apr. 2002, p. 504)

Description: This conference will bring together experts in the fields of mathematics, computer science, statistics, operations research, physics, engineering, and finance to discuss the latest developments in Monte Carlo and quasi-Monte Carlo methods

and their applications. MCQMC 2002 is the fifth in a series of international meetings. The program will consist of invited plenary talks, several special thematic sessions, and contributed talks.

Program Committee: K.-T. Fang (Hong Kong), P. Glasserman (USA), S. Heinrich (Germany), F. J. Hickernell (Hong Kong), P. L'Ecuyer (Canada), H. Niederreiter (Singapore, chair), E. Novak (Germany), A. Owen (USA), I. H. Sloan (Australia), J. Spanier (USA), D. Talay (France), S. Tavaré (USA), J.-S. Wang (Singapore), H. Wozniakowski (USA/Poland).

Invited Speakers: P. Boyle (Canada), S. Heinrich (Germany), P. L'Ecuyer (Canada), J. S. Liu (USA), D. Talay (France), W. Wagner (Germany), G. Wasilkowski (USA), C. P. Xing (Singapore).

Call for Papers: Abstracts of contributed talks should be submitted to H. Niederreiter by July 31, 2002. The abstract should fit on one page and include the title of the talk, the name, affiliation, full postal address, and e-mail address of the speaker, and a summary of the talk which provides sufficient information to assess the relevance and novelty of the results. The preferred mode is electronic submission in LaTeX or PostScript format. Notification of the acceptance of the talk will be given about one month after the above deadline.

Contact: H. Niederreiter, Department of Mathematics, National University of Singapore, 2 Science Drive 2, Singapore 117543, Republic of Singapore; e-mail: nied@math.nus.edu.sg.

Information: Regularly updated information can be obtained from the webpage <http://www.mcqmc2002.math.nus.edu.sg/>.

*28-30 **The Third International Conference on Mathematical Modeling and Computational Experiments (ICMMCE 2002)**, Tajik State National University, Dushanbe, Tajikistan.

Description: The Conference on Mathematical Modeling and Computing Experiments is devoted to different aspects of Applied Sciences. Papers will include the following topics and related areas: theoretical questions of mathematical modeling; mathematical modeling of economical, ecological, social and physical processes.

Deadline: September 30, 2002.

Information: Detailed information can be obtained from M. Yunusi, Department of Modeling and Informatics, TGNU, Rudaki str. 17, Dushanbe, 734025, Tajikistan; e-mail: yunusi@pochtamt.ru, mamadyusuf_tj@yahoo.com, tgnu@mail.ru.

December 2002

2-6 **Joint IMA/CRM Workshop: Distribution Systems: Location and Vehicle Routing**, University of Montreal, Quebec, Canada.

Organizers: M. Gendreau (Montreal), G. Laporte (Montreal).

Information: <http://www.crm.umontreal.ca/>.

2-21 **Workshop (02-18) & Conference (19-21) on Geometric Group Theory**, Guwahati, India.

Topics: Coxeter groups and complexes, Tits buildings, Bass-Serre theory of groups acting on trees, combinatorial methods in group theory, and Gromov's theory of hyperbolic groups. The participants of the workshop are expected to be young researchers. Besides the invited lectures, there is the possibility of having some contributed talks at the conference.

Organizers: N. S. N. Sastry, Indian Statistical Institute, Bangalore; M. Bhattacharjee, Indian Institute of Technology, Guwahati, India.

Information: <http://www.isibang.ac.in/>, <http://www.iitg.ernet.in/>.

4-6 **DIMACS Workshop on Implementation of Geometric Algorithms**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Sponsor: DIMACS Center.

Description: It is notoriously difficult to implement geometric algorithms. This difficulty arises in part from the conceptual complexity of geometric algorithms, the proliferation of special cases, the dependence of combinatorial decisions on numerical compu-

tation, and frequent theoretical focus on worst-case asymptotic behavior.

This workshop will address research issues related to the implementation of geometric algorithms. Typical, but not exclusive, topics include: numerical issues, noisy data and data repair, geometric data structures, massive geometric data sets, algorithm library design, algorithm engineering, and experimental studies.

We plan to bring together both researchers and practitioners. We hope that practitioners will benefit from discussions of the state of the art in research and that researchers will benefit by being exposed to implementation issues of practical importance.

Organizers: H. Bronnimann, Polytechnic University, hbr@poly.edu; S. Fortune, Bell Laboratories, Lucent Technologies, sjf@bell-labs.com.

Local Arrangements: J. Thiemann, DIMACS Center, jennifer@dimacs.rutgers.edu, 732-445-5928.

Information: Visit <http://dimacs.rutgers.edu/Workshops/GeomAlgorithms/>.

5-8 **Geometry and Topology of Quotients**, University of Arizona, Tucson, Arizona.

Focus: The conference focuses on various aspects of geometry and topology of quotients naturally arising in algebraic and symplectic geometry. The plenary lectures will survey recent progress and current directions of research in geometric invariant theory and symplectic reductions, explain connections with other disciplines and applications to physics. In addition to principal lectures, there will be sessions of contributed talks and round-table discussions. Women and minority researchers are encouraged to participate.

Principal Speakers: I. Dolgachev (Michigan), W. Fulton (Michigan), S. Keel (Texas), J. Li (Stanford), R. Sjamaar (Cornell), S. Tolman (Illinois), A. Weinstein (Berkeley).

Local Organizers: P. Bressler, P. Foth, Y. Hu, J.-H. Lu.

Financial Support: Available for graduate students and researchers with no other means of support.

Information: <http://www.math.arizona.edu/~foth/gtq.html>.

9-12 **ICDM '02: The 2002 IEEE International Conference on Data Mining Sponsored by the IEEE Computer Society**, Maebashi TERRSA, Maebashi City, Japan.

Information: See <http://kis.maebashi-it.ac.jp/icdm02/> or mirror page: <http://www.wi-lab.com/icdm02/>.

9-13 **9th Annual Biopharmaceutical Applied Statistics Symposium**, Savannah, Georgia.

Organizers: MCV/VCU and GASOU Biostatistics Departments.

Information: 12 tutorials, 4 short courses on topics related to research, development and regulation of pharmaceuticals, with emphasis on biostatistics; e-mail: KEPeace@gasou.edu; <http://views.vcu.edu/bis/bass/>.

9-13 **Elliptic Cohomology and Chromatic Phenomena**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England. (Apr. 2002, p. 504)

EuroWorkshop Organizers: D. C. Ravenel and H. R. Miller.

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; e-mail: info@newton.cam.ac.uk. Please refer to our website, <http://www.newton.cam.ac.uk/programs/NST/>, for full details of how to apply for these workshops.

9-13 **FICOFEST, A Conference in Low-Dimensional Topology to Celebrate the Sixtieth Birthday of Francisco Javier "Fico" Gonzalez Acuna**, Universidad Autonoma de Yucatan, Merida, Yucatan, Mexico. (May 2002, p. 608)

Organizers: M. Eudave-Munoz (UNAM), V. Nunez (CIMAT), L. Armas-Sanabria (UNAM), M. Neumann-Coto (UNAM), J. Seade (UNAM), J. C. Gómez-Larrañaga (CIMAT).

Speakers: M. Boileau, D. Gabai, S. Gitler, C. Gordon, J. Hempel, L. Kauffman, R. Kirby, R. Lickorish, S. López de Medrano, J. Luecke,

L. Montejano, K. Murasugi, R. Myers, D. Rolfsen, D. Roseman, M. Schurlemann, P. Scott, H. Short, J. Simon, D. Summers, A. Verjovsky, E. Winkelkemper.

Information: <http://www.matem.unam.mx/ficofest/> or contact M. Eudave-Munoz at: ficofest@cimat.mx.

9-13 27th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (27ACCMCC), The University of Newcastle, Newcastle, NSW, Australia. (Feb. 2002, p. 271)

Topics: 27ACCMCC is a forum in which researchers can present their work and exchange ideas with others in their field. Topics of interest cover all areas of combinatorial mathematics, combinatorial computing, and combinatorial optimization.

Invited Speakers: D. Cvetkovic (Univ. of Belgrade); M. Fellows (Univ. of Newcastle); M. Miller (Univ. of Newcastle); A. Rosa (McMaster Univ.); J. Siran (Slovak Univ. of Technology).

Organizers: L. Brankovic (Univ. of Newcastle); R. Webber (Univ. of Newcastle); N. Natchimuthu (Univ. of Newcastle); L. Mathieson (Univ. of Newcastle); M. Skerritt (Univ. of Newcastle).

Information: <http://www.cs.newcastle.edu.au/~accmcc/>; accmcc@cs.newcastle.edu.au.

9-13 II Workshop on Dynamics and Randomness, Departamento de Ingeniería Matemática, Universidad de Chile, Santiago, Chile.

Brief Description of Workshop: Courses and conferences will cover topics in probability theory, symbolic dynamics, ergodic theory, and statistical physics.

Invited Speakers: V. Baladi (IHES), J. Bertoin (Univ. de Paris VI), A. Bovier (Weierstrass Inst. for Applied Analysis and Stochastics), P. Collet (École Polytechnique), F. Durand (Univ. de Picardie), S. Lalley (Chicago Univ.), E. Lindenstrauss (Stanford Univ.), S. Méléard (Univ. Paris X and Univ. Paris VI), Y. Peres (Univ. of California), K. Petersen (Univ. of North Carolina), P. Picco (CMM UCHILE-CNRS), B. Schmitt (Univ. de Bourgogne), A. Vershik (Math. Inst. of Russian Academy of Science at St. Petersburg), M. Viana (IMPA).

Information: e-mail: dynamics@dim.uchile.cl; <http://www.dim.uchile.cl/>.

14-16 International Symposium on Pure and Applied Mathematics: ISPAM 2002, Calcutta, India.

Dedication: The symposium is dedicated to Niels Henrik Abel to mark the 200th anniversary of his birth.

Topics: (a) Algebra and its applications, (b) Analysis and topology and their applications, (c) Geometry and its applications, (d) Dynamical systems, chaos and fractals, (e) Continuum mechanics, (f) Plasma physics, (g) Control theory and optimization theory, (h) Biomechanics, (i) Applications of mathematics to environmental problems, and (j) History and philosophy of physical science.

Information: All correspondence in regard to the symposium is to be addressed to: M. R. Adhikari, Calcutta Math. Soc., AE-374, Sector-1, Salt Lake City, Calcutta-700064, India; e-mail: cms@ca12.vsnl.net.in; or H. P. Mazumdar, Convenor, Physics and Appl. Math. Unit, Indian Statistical Institute, 203 B. T. Road, Calcutta-700035, India; e-mail: hpm@isical.ac.in.

27-30 ASL Winter Meeting (with APA), Philadelphia Marriott, Philadelphia, Pennsylvania.

Program Committee: J. Burgess, B. Ewald, and S. Weinstein (Chair).

Abstracts: Abstracts of contributed talks submitted by ASL members will be published in *The Bulletin of Symbolic Logic* if they satisfy the rules for abstracts (see <http://aslonline.org/Meetings.htm>). Abstracts must be received by the deadline of September 16, 2002, at the ASL business office: ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, NY 12604; fax: 1-845-437-7830; e-mail: asl@vassar.edu.

January 2003

January-August Thematic Program on Automorphic Forms, The Fields Inst. for Research in Math. Sciences, Toronto, Canada. (Dec.

2001, p. 1368)

Description: The theory of automorphic forms is a wide and deep subject touching many areas of mathematics. Our purpose is to concentrate on the geometric and analytic aspects of the subject. These have far-reaching applications in classical number theory. The Langlands-Shahidi method and the converse theorem of Cogdell-Piatetski-Shapiro have seen exciting new developments recently. These include new cases of functoriality, as well as analytic continuation of symmetric power L-functions. The work of Kim-Shahidi will be one of the central themes of the program. The analytic theory of L-functions and its applications has also seen many advances in recent years. We hope to cover some aspects of these, especially those connected with the analyticity of symmetric power L-functions as well as those of Hasse-Weil zeta functions. An important problem is to express the Hasse-Weil zeta function of a Shimura variety in terms of automorphic L-functions. Here in order to define the local factors not just at primes of good reduction, we need to study the variety at the finite set of primes of bad reduction. Such a description would allow one to apply the aforementioned progress in L-functions to the study of deep arithmetic properties of these varieties. One of the major remaining obstacles to proving such a description is the so-called "fundamental lemma", a conjecture in local harmonic analysis that asserts the equality of certain orbital integrals on a p-adic group and on a related (endoscopic) group. We plan to review recent work of Goresky-Kottwitz-MacPherson and others which gives a geometric approach to this problem.

Organizers: J. Arthur, T. Haines, H. Kim, R. Murty, G. Pappas, F. Shahidi.

Information: To be informed of when registration is open and to receive updates about the Thematic Program on Automorphic Forms, please subscribe to the mail list at <http://www.fields.utoronto.ca/maillist/>, or contact automorphic@fields.utoronto.ca.

3-5 3rd Mediterranean Conference on Mathematical Education, Athens, Greece.

Conference Themes: Mathematics in the Modern World, Mathematics and Didactics, Mathematics and Life, Mathematics and Society.

Invited Speakers: M. Artigue, Univ. Denis Diderot, Paris, France; W. Blum, Univ. of Kassel, Germany; T. Exarchakos, Univ. of Athens; A. Fokas, Univ. of Cambridge; A. Gagatsis, Univ. of Cyprus; C. Laborde, Univ. Joseph Fourier-CNRS, France; M. Niss, Roskilde Univ., Denmark; D. Tirosh, Tel Aviv Univ., Israel.

Language: English.

Information: MEDCONF2003 Organizing Comte.: Hellenic Mathematical Society, 34 Panepistimiou Street, GR 10679 Athens, Greece; tel: +3010-3616532, +3010-3617784; fax: +3010-3641025; e-mail: mes3@hms.gr; <http://www.hms.gr/>. MEDCONF2003 Scientific Comte.: Cyprus Mathematical Society, 36 Stasinou Street, Office 102, Strovolos 2003, Nicosia, Cyprus; fax: +357-22-379122; e-mail: gagatsis@ucy.ac.cy, cms@cms.org.cy; <http://www.cms.org.cy/>.

6-7 IMA Short Course: Industrial Strength Optimization, Minneapolis, Minnesota.

Presenters: J. Dennis (Rice Univ.), C. Audet (École Polytechnique de Montréal).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/winter/iso.html>.

6-9 Third International Workshop on Scientific Computing and Applications, City University of Hong Kong, Hong Kong, China.

Organizers: Y. Y. Lu, W.-W. Sun, T. Tang.

Information: <http://math.cityu.edu.hk/sca03/>.

6-11 International Conference on Dynamical Systems and Geometry, to Celebrate the Sixtieth Anniversary of Alberto Verjovsky,

Cuernavaca, Mexico. (Oct. 2001, p. 1051)

Scientific Committee: J. Eells, E. Ghys, M. Lyubich, J. Palis, and J. Seade.

Information: jseade@matcuer.unam.mx.

8 IMA Tutorial: Optimization in Simulation-Based Models, Minneapolis, Minnesota.

Organizer: J. Nocedal (NWU).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/winter/t2.html>.

9-16 IMA Workshop 4: Optimization in Simulation-Based Models, Minneapolis, Minnesota.

Organizers: A. Conn (IBM), O. Ghattas (CMU), J. Nocedal (NWU), F. Santosa (UMN).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/winter/op4.html>.

12-14 ACM-SIAM Symposium on Discrete Algorithms, Hyatt Regency, Baltimore, Maryland. (May 2002, p. 608)

Information: Contact: meetings@siam.org.

15-18 Joint Mathematics Meetings, Baltimore Convention Center, Baltimore, Maryland.

Information: http://www.ams.org/amsmtgs/2074_intro.html.

17-18 2002-2003 ASL Winter Meeting (with Joint Mathematics Meetings), Baltimore Convention Center, Baltimore, Maryland.

Description: This meeting will take place in conjunction with the Joint Mathematics Meetings, which will be held January 15-18, 2003.

Program Committee: H. Becker (Chair), M. C. Laskowski, and R. Solomon.

Abstracts: Abstracts of contributed talks submitted by ASL members will be published in *The Bulletin of Symbolic Logic* if they satisfy the rules for abstracts (see <http://aslonline.org/Meetings.htm>). Abstracts must be received by the deadline of September 30, 2002, at the ASL business office: ASL, Box 742, Vassar College, 124 Raymond Avenue, Poughkeepsie, NY, 12604, USA; fax: 1-845-437-7830; e-mail: asl@vassar.edu.

February 2003

* **3-7 Emerging Applications of the Nonlinear Schrödinger Equations**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/nls2003/>.

9 Short Course Prior to Conference on Computational Science and Engineering, Hyatt Regency Islandia Hotel and Marina, San Diego, California. (May 2002, p. 608)

Information: Contact: meetings@siam.org.

10-14 Permutation Patterns, University of Otago, Dunedin, New Zealand. (May 2002, p. 608)

Topics: The unifying theme of the conference is permutation patterns. The topics addressed will include enumeration questions, excluded pattern questions, study of the involvement order, algorithms for computing with permutation patterns, applications and generalizations of permutation patterns, and others.

Speaker: H. Wilf.

Program Chair: M. Albert.

Registration: \$100 NZ by November 1, 2002, and \$150 thereafter.

Submissions: Extended abstracts (at most 6 pages) of papers to be presented at the conference should be sent to the Program Chair by December 31, 2002.

Information: See <http://www.cs.otago.ac.nz/staffpriv/mike/PP2003/FirstAnnouncement.html>.

* **18-21 Cells & Materials: At the Tissue Engineering Interface**, Institute for Pure and Applied Mathematics at UCLA, Los Angeles, California.

Information: <http://www.ipam.ucla.edu/programs/te2003/>.

21-22 XVIII Inter-University Seminar on Research in the Mathematical Sciences (SIDIM), Pontifical Catholic University, Ponce, Puerto Rico.

Description: The SIDIM's (its name in Spanish) activities will include: invited and contributed talks in pure and applied mathematics, computer sciences, statistics and mathematics education; student poster sessions; and exhibit booths and recruiters from universities with graduate programs.

Abstracts for contributed talks or posters should be sent by email to sidim@cuhwww.upr.clu.edu in any one of the standard formats: TeX, LaTeX (preferred), MS Word, Word Perfect, etc., or on diskette to the following address: SIDIM 2003, Attn: Pablo V. Negró, University of Puerto Rico, Department of Mathematics, Humacao, PR 00791-4300.

Deadline: The deadline for abstract submission is January 15, 2003.

Information: Further details and information about the activity (preliminary program, hotels, etc.) will be available from the SIDIM webpage at <http://cuhwww.upr.clu.edu/~sidim/>.

March 2003

* **10-12 International Conference on Mathematics and Its Applications**, Kuwait University, Kuwait.

Description: The conference will provide an opportunity for the presentation and exchange of the latest research by those interested in mathematics and its applications in Computational Differential Equations, Computational Linear Algebra, Integral Transforms, Special Functions, Fractional Calculus, Groups, Rings, Categories, and Differential Geometry.

Information: For detailed information please visit our website, <http://www.sci.kuniv.edu.kw/ICMA03.html>.

11 IMA Tutorial: Semidefinite Programming and Robust Optimization, Minneapolis, Minnesota.

Organizer: M. Todd (Cornell).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/winter/t3.html>.

12-19 IMA Workshop 5: Semidefinite Programming and Robust Optimization, Minneapolis, Minnesota.

Organizers: D. Goldfarb (Columbia), M. Todd (Cornell), M. Overton (NYU), M. Goemans (MIT), L. El Ghaoui (Berkeley).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/winter/op5.html>.

14-16 AMS Southeastern Section Meeting, Louisiana State University, Baton Rouge, Louisiana.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

17-20 SIAM Conference on Mathematical and Computational Issues in the Geosciences, Radisson Hotel and Suites Austin, Austin, Texas. (May 2002, p. 608)

Information: Contact: meetings@siam.org.

* **27-30 Quadrature Domains and Related Topics**, University of California, Santa Barbara.

Description: The conference will be devoted to the theory of quadrature domains and its ramifications to function theory,

inverse problems, fluid dynamics, and holomorphic PDE's. The event will coincide with the 75th birthday of Harold S. Shapiro, who is one of the founders of the theory.

Confirmed Invited Speakers: D. Aharonov (Technion, Haifa), S. Bell (Purdue Univ.), P. Duren (Michigan Univ.), F. Forsternic (Ljubljana, Slovenia), L. Karp (Ort Braude College, Israel), J. McCarthy (Washington Univ.), W. T. Ross (Univ. Richmond), M. Sakai (Tokyo), A. Solynin (Sankt Petersburg), H. Shahgholian (Stockholm), H. S. Shapiro (Stockholm), S. Webster (Univ. Chicago).

Organizing Committee: P. Ebenfelt (pebenfel@math.ucsd.edu), B. Gustafsson (gbjorn@math.kth.se), D. Khavinson (dmitry@comp.uark.edu), M. Putinar (mputinar@math.ucsb.edu).

Information: Further information will be regularly updated and available on the websites of the organizers.

April 2003

4-6 AMS Central Section Meeting, Indiana University, Bloomington, Indiana.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

6 IMA Tutorial: Network Management and Design, Minneapolis, Minnesota.

Organizer: T. Carpenter (Telcordia).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/spring/t4.html>.

7-11 IMA Workshop 6: Network Management and Design, Minneapolis, Minnesota.

Organizers: D. Bienstock (Columbia), T. Carpenter (Telcordia), D. Johnson (AT&T), C. Monma (Telcordia), B. Shepherd (Lucent Technologies).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/spring/op6.html>.

12-13 AMS Eastern Section Meeting, Courant Institute, New York, New York.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

17-19 The Sixth Asian Symposium on Computer Mathematics (ASCM 2003), Beijing, China.

Description: The Asian Symposium on Computer Mathematics (ASCM) is a series of conferences which offers an opportunity for participants to present original research, to learn of research progress and new developments, and to exchange ideas and views on doing mathematics using computers. ASCM 2003 will provide an international forum for active researchers to review the current state of the art and trends on computer mathematics. The symposium will consist of plenary sessions by invited speakers, regular sessions of contributed papers, and software demonstrations.

Information: <http://www.mmrc.iss.ac.cn/~ascm/>.

May 2003

1-3 SIAM International Conference on Data Mining, Cathedral Hill Hotel, San Francisco, California. (May 2002, p. 608)

Information: Contact: meetings@siam.org.

3-4 AMS Western Section Meeting, San Francisco State University, California.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

3-5 First International Conference on Smarandache Geometries, Griffith Univ., Gold Coast Campus, Australia. (Dec. 2001, p. 1368)

Description: An axiom is said to be smarandachely denied if in the same space the axiom behaves differently (i.e., validated and invalidated or only invalidated, but in at least two distinct ways).

A Smarandache geometry is a geometry which has at least one smarandachely denied axiom (1969). Thus, as a particular case, Euclidean, Lobachevsky-Bolyai-Gauss, and Riemannian geometries may be united altogether, in the same space, by some Smarandache geometries. These last geometries can be partially Euclidean and partially non-Euclidean. It seems that Smarandache geometries are connected with the theory of relativity (because they include the Riemannian geometry in a subspace) and with the parallel universes.

Speakers: M. Antholy (Canada), H. Iseri (USA), M. Bencze (Romania).

Deadline for Submission of Abstracts: April 30, 2003. Papers are welcome and will be published in a collected papers book. See a club about these geometries at <http://clubs.yahoo.com/clubs/smarandachegeometries/>.

Information: J. Allen, Office 2.36 Education Building, Griffith Univ., Gold Coast Campus, Australia. Conference home page: <http://www.gallup.unm.edu/~smarandache/geometries.htm>.

5 IMA Tutorial: Data Analysis and Optimization, Minneapolis, Minnesota.

Organizers: J. Kleinberg (Cornell), A. Tomkins (IBM).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/spring/t5.html>.

6-9 IMA Workshop 7: Data Analysis and Optimization, Minneapolis, Minnesota.

Organizers: R. Kannan (Yale), J. Kleinberg (Cornell), P. Raghavan (Verity), C. Papadimitriou (Berkeley).

Contact: Institute for Mathematics and its Applications, Univ. of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; e-mail: visit@ima.umn.edu; <http://www.ima.umn.edu/optimization/spring/op7.html>.

11-16 International Conference on General Control Problems and Applications (GCP 2003): Dedicated to the 100th Anniversary of A. N. Kolmogorov, Tambov State University, Tambov, Russia.

Scope: A. N. Kolmogorov's creative legacy; optimization theory and its prospects; approximation methods and stability in control; variation methods for nonlinear systems investigations and their applications; mathematical models of economic systems control; mathematical models of control in technical, natural sciences, and humanities.

Organizers: Moscow M. V. Lomonosov State Univ.; Steklov V. A. Inst. of Math. of the Russ. Acad. of Sci.; Ministry of Education of Russian Federation; Ministry of Industry, Science, and Technologies of Russian Federation; Tambov Region Administration; Tambov G. R. Derzhavin State Univ.

Program Committee: V. M. Filippov, A. B. Kurzhansky, Yu. S. Osipov, V. A. Sadovnichy, V. M. Tikhomirov (chairmen); A. I. Bulgakov (deputy); A. P. Afanasiev, A. V. Arutyunov, N. A. Bobylev, A. G. Chentsov, V. B. Demidovich, V. V. Dikumar, A. V. Dmitruk, I. V. Evstigneev, V. I. Levin, G. G. Magaril-Il'yayev, S. M. Nikol'sky, Yu. V. Pokorniy, E. L. Tonkov, M. I. Zelikin; E. S. Zhukovsky (scientific secretary).

Languages of Conference: Russian, English.

Call for Papers: Authors are kindly invited to submit abstracts before November 1, 2002. Contributions must be prepared in LaTeX.

Information: Contacts: For up-to-date information, please visit our website, <http://www.opu2003.narod.ru/>, or contact the conference committee via e-mail: aib@tsu.tmb.ru, uaa@hmb.nnn.tstu.ru.

11-18 Conference on Topological Algebras, Their Applications, and Related Topics, Poznan, Poland.

Description: The conference will take place at the Mathematical Conference Center in Bedlewo, near Poznan, Poland, to celebrate the 70th birthday of Professor Wieslaw Zelazko.

Topics: General theory of Banach and topological algebras, Spectral theory of Banach and topological algebras, Operator theory, Topological algebras and complex analysis, Harmonic analysis, Homological methods in the theory of Banach algebras, Automatic continuity, Representations, structure and classification of topological algebras, Nonassociative topological algebras.

Information: <http://main.amu.edu.pl/~ta2003/>; e-mail: ta2003@amu.edu.pl; or write to A. Soltysiak, Faculty of Mathematics and Computer Science, Adam Mickiewicz University, 60-769 Poznan, Poland.

20–24 Fourth Seminar on Stochastic Analysis, Random Fields and Applications, Fourth Minisymposium on Stochastic Methods in Financial Models, Centro Stefano Franscini, Ascona, Switzerland. (May 2002, p. 608)

Organizer: R. Dalang EPFL (Switzerland), M. Dozzi (Univ. Nancy 2, France), and F. Russo (Univ. Paris 13, France).

Information: <http://www-math.math.univ-paris13.fr/~russo/Ascona02.html>.

20–24 The 31st Annual Canadian Operator Theory and Operator Algebras Symposium, UNB, Fredericton, New Brunswick, Canada. (Sept. 2001, p. 910)

Information: <http://www.math.unb.ca/cos.html>.

26–30 SampTA03 (Sampling Theory and Applications 2003), Strobl, Salzburg, Austria.

Program: This conference will gather mathematicians, engineers, and applied scientists involved in modern data processing problems. It will cover the mathematical foundations of modern sampling theory, the numerical aspects and the development of efficient algorithms for sampling and reconstruction, and the practical applications of sampling techniques in a variety of applications.

Topics: Nonuniform sampling, numerical methods, frames and non-orthogonal expansions, greedy algorithms, radial basis functions, sampling topics related to wavelet and Gabor theory.

Organizers: H. G. Feichtinger and NuHAG (Numerical Harmonic Analysis Group), Department of Mathematics, University of Vienna, Strudlhofgasse 4, A-1090 Wien, Austria.

Information: <http://www.univie.ac.at/NuHAG/SampTA03/>.

27–31 SIAM Conference on Applications of Dynamical Systems, Snowbird Ski and Summer Resort, Snowbird, Utah. (May 2002, p. 608)

Information: Contact: meetings@siam.org.

June 2003

1–4 2003 ASL Annual Meeting, University of Illinois at Chicago, Chicago, Illinois.

Program Committee: A. Blass (Chair).

Organizing Committee: W. Blok, B. Hart (Chair), B. Howard, and D. Marker.

1–6 International Conference on Group Theory: Combinatorial, Geometric, and Dynamical Aspects of Infinite Groups, Gaeta, Italy.

Program: Geometric group theory; ergodic theory; groups acting on trees and boundaries; random walks; amenability; growth of groups, languages, and automata; groups and fractals; L^2 -cohomology; bounded cohomology; branch groups; groups generated by finite automata; calculus of spectra; problems of Burnside type; combinatorics of words.

Organizers: L. Bartholdi, Univ. of Calif., Berkeley; T. Ceccherini-Silberstein, Univ. del Sannio di Benevento; T. Smirnova-Nagnibeda, Royal Inst. of Tech., Stockholm; A. Zuk, Ecole Normale Supérieure de Lyon.

Plenary Speakers: D. Anosov (Steklov Institute, Moscow); G. Baumslag (City Univ., New York); M. Burger (ETH Zürich); H. Furstenberg (Hebrew Univ., Jerusalem); E. Ghys (ENS Lyon); R. Grigorchuk

(Steklov Institute, Moscow); M. Gromov (IHES, Paris); F. Grunewald (Univ. of Düsseldorf); P. de la Harpe (Univ. of Geneva); V. Jones (UC Berkeley); A. Lubotzky (Hebrew Univ., Jerusalem); W. Lück (Univ. of Münster); A. Ol'shanskii (Vanderbilt Univ., Nashville, and Moscow State Univ.); G. Pisier (Texas A&M and Univ. of Paris VI); S. Sidki (Univ. of Brasília); A. Valette (Univ. of Neuchâtel); A. Vershik (Steklov Institute, St. Petersburg); E. Zelmanov (Yale Univ., New Haven).

Information: e-mail: gaeta@mat.uniroma1.it or orgaeta@math.kth.se; <http://www.marth.kth.se/~gaeta/>.

16–20 2003 SIAM Annual Meeting, Queen Elizabeth Hotel, Montreal, Quebec, Canada.

Information: Contact: meetings@siam.org.

* **16–21 International Conference: Kolmogorov and Contemporary Mathematics**, Moscow, Russia.

Description: In commemoration of the centennial of Andrei Nikolaevich Kolmogorov. The conference will cover the main areas of A.N. Kolmogorov's scientific interests with an emphasis on his vision of mathematics in its fundamental unity as recent developments in the fields of Dynamic Systems and Ergodic Theory, Theory of Functions and Functional Analysis, Theory of Probability and Mathematical Statistics, Turbulence and Hydrodynamics, Mathematical Logic and Theory of Complexity, Geometry and Topology.

Format: Invited one-hour speakers for the General Plenary Sessions (by invitation from the Organizing and Scientific Committee), invited 45-min. speakers for the Thematic Plenary Sessions (by invitation from the Organizers of the Thematic Sessions), and contributed 20-min. talks (by selection of the organizers of the Thematic Sessions). Poster presentations are also planned.

Languages: Russian, English.

Information: Kolmogorov-100 Conference, Steklov Mathematical Institute, Gubkin str. 8, 119991, Moscow, Russia; or Faculty of Mechanics and Mathematics, Moscow State University, Main Building, Leninskie Gory, 119992, Moscow, kolmogorov-100@mi.ras.ru. For further information (Plenary speakers, program, schedule, call for abstracts accommodations, social events, excursions, travel information, etc.), please visit: <http://kolmogorov-100.mi.ras.ru/>.

17–21 Fourth Geoffrey J. Butler Memorial Conference, University of Alberta, Edmonton, Alberta, Canada.

Description: A gathering for researchers and students in differential equations and mathematical biology.

Information: <http://conley.math.ualberta.ca/butler.html>.

18–21 First Joint International Meeting between the American Mathematical Society and the Real Sociedad Matematica Espanola, Seville, Spain.

Information: <http://www.us.es/rsme-ams/>.

* **29 The Role of Mathematics in XXI Century**, Novosibirsk University, Novosibirsk, Russia.

Organizers: Novosibirsk State University, Sobolev Institute of Mathematics, Institute of Discrete Mathematics and Informatics, MMD NSU Foundation.

Chairman of Program Committee: Yu. L. Ershov.

Contacts: e-mail: mmf@math.nsc.ru.

Information: <http://mmfd.nsu.ru/fmmf/smmfe/workf/kongres.html>.

July 2003

7–11 ICIAM 2003, 5th International Congress on Industrial and Applied Mathematics, Sydney, Australia.

Information: Visit the website at <http://www.iciam.org/> for full information about speakers, registration, embedded submeetings, deadlines for minisymposia and abstracts, venue, accommodations, sponsors and the organizers.

15–19 **SIAM Conference on Applied Linear Algebra**, William and Mary College, Williamsburg, Virginia.

Information: Contact: meetings@siam.org.

27–August 9 (NEW DATE) **Banach Algebras and Their Applications: Banach Algebras 2003**, Edmonton, Alberta, Canada.

Description: This conference is the sixteenth in a series of conferences on Banach algebras that started in 1974 in Los Angeles. We expect that most specialists in Banach algebras as well as leading mathematicians from related areas will attend this conference. In the past, these conferences have always led to fruitful interaction between the participants, and we expect this tradition to continue. In addition to the regular conference program consisting of one-hour and half-hour talks by the participants, we also plan to hold five workshops on the following topics, each of which will be chaired by an internationally recognized specialist in the respective area: Banach algebras in harmonic analysis (to be held in honor of Eberhard Kaniuth on the occasion of his retirement), Chair: A. T.-M. Lau (Edmonton); Banach algebras in operator theory, Chair: M. M. Neumann (Starkville; USA); Banach algebras and operator spaces, Chair: Z.-J. Ruan (Urbana-Champaign; USA); K-theory of Banach algebras, Chair: J. Cuntz (Muenster, Germany); Topological homology, Chair: A. Ya. Helemskii (Moscow, Russia). Each workshop will occupy two afternoons. The chairs are completely free to decide on the format of their workshops.

Information: For more detailed information, including a list of invited speakers, see the conference website at <http://www.math.ualberta.ca/~ba03/>.

August 2003

14–20 **2003 ASL European Summer Meeting (Logic Colloquium '03)**, Helsinki, Finland.

Program Committee: P. Aczel, Z. Adamowicz, J. Baldwin, E. Bouscaren, M. Detlefsen, M. Gitik, L. Hella, T. Jech, R. Parikh, H. Schwichtenberg, T. Slaman, V. Stoltenberg-Hansen (Chair), and J. Vaananen.

Organizing Committee: T. Huuskonen, T. Hyttinen, J. Kennedy, K. Luosto, J. Oikkonen, J. Vaananen (Chair), and P. Vaisanen.

September 2003

* 24–26 **International Conference on Differential Equations Devoted to the 100th Anniversary of K. P. Persidskii**, Institute of Mathematics of the ME&S of the RK, Almaty, Kazakhstan (CIS).

Background: The conference honors K. P. Persidskii, the academician of the Academy of Sciences of Kazakh Republic (1946), well known to mathematicians all over the world for his significant contribution to the theory of differential equations.

Workshop Topics: 1) Differential equations, 2) Dynamic systems, 3) Theory of stability, 4) Mathematical physics, 5) Related problems of mathematical analysis, 6) Applied and numerical mathematics.

Speakers: M. I. Imanaliev (Kyrgyzstan), V. M. Millionshchikov (Russia), M. I. Rakhimberdiev (Kazakhstan), R. Kh. Rozov (Russia), V. V. Rumyantsev (Russia), A. M. Samoilenko (Ukraine).

Deadlines: April 1, 2003: deadline for submission of applications; June 1, 2003: conformation of acceptance; July 1, 2003: fee payments for accepted participants.

Information: Z. G. Kozhakhmetovna; Tel.: +7(3272) 91-37-64; fax: +7(3272)91-37-40; e-mail: zakir@math.kz, Institute of Mathematics of the ME&S of the RK, 125, Pushkin street, 480100 Almaty, Kazakhstan (CIS).

October 2003

11–12 **AMS Eastern Section Meeting**, SUNY-Binghamton, Binghamton, New York.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

* 15–20 **Von Neumann Centennial Conference: Linear Operators**

and Foundations of Quantum Mechanics, Budapest, Hungary.

Description: The conference will cover many topics in linear operator theory and the mathematical foundations of quantum mechanics, including recent developments showing the broad and long-standing impact of von Neumann's work. In addition to a session devoted to historical and personal perspectives on von Neumann, the main subjects are: linear operators, especially Schrödinger and other unbounded operators, their role in mathematical physics; stochastics aspects of quantum mechanics, for example, probability and statistics in the Hilbert space formalism; quantum information theory and quantum entropy; algebras of operators, von Neumann algebras and their applications in quantum statistical mechanics and in field theory; formal approaches to quantum theory, such as quantum logics and quantum structures.

Advisory Board: H. Araki, A. Jaffe, P. D. Lax, J. Palis, W. Thirring.

Main Organizer: D. Petz.

Information: <http://www.math.bme.hu/~vonneumann/>.

* 24–25 **AMS Southeastern Section Meeting**, University of North Carolina, Chapel Hill, North Carolina.

Information: G. Alsfeld; e-mail: gma@ams.org; <http://www.ams.org/amsmtgs/sectional.html>.

December 2003

17–20 **First Joint International Meeting between the American Mathematical Society and Various Indian Mathematical Societies**, Goa, India.

Information: <http://www.ams.org/amsmtgs/internmtgs.html>.

January 2004

7–10 **Joint Mathematics Meetings**, Phoenix Civic Plaza, Phoenix, Arizona.

Information: http://www.ams.org/amsmtgs/2004_phioeintro.html.

March 2004

* 12–13 **AMS Southeastern Section Meeting**, Florida State University, Tallahassee, Florida.

Information: G. Alsfeld; gma@ams.org; <http://www.ams.org/amsmtgs/sectional.html>.

26–27 **AMS Central Section Meeting**, Ohio University, Athens, Ohio.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

April 2004

* 17–18 **AMS Eastern Section Meeting**, Rider University, Lawrenceville, New Jersey.

Information: G. Alsfeld; e-mail: gma@ams.org; <http://www.ams.org/amsmtgs/sectional.html>.

* 6–7 **AMS Eastern Section Meeting**, University of Pittsburgh, Pittsburgh, Pennsylvania.

Information: G. Alsfeld; e-mail: gma@ams.org; <http://www.ams.org/amsmtgs/sectional.html>.

January 2005

5–8 **Joint Mathematics Meetings**, Hyatt Regency Atlanta & Atlanta Marriott Marquis, Atlanta, Georgia.

Information: <http://www.ams.org/amsmtgs/national.html>.