
Mathematics Calendar

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

April 2003

* 7-9 **Workshop on Geometric Measure Theory and Calculus of Variations**, Centro Congressi Panorama in Sardinia, Trento, Italy. **Information:** For further information and applications please contact: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento); tel: +39-0461-881628; fax: +39-0461-810629; email: michelet@science.unitn.it; [http://degiorgi.science.unitn.it](http://degiorgi.science.unitn.it/~baldo/workshop/); <http://www.science.unitn.it/cirm/>.

* 10-12 **28th Arkansas Spring Lecture Series**, University of Arkansas, Fayetteville, Arkansas.

Invited Speakers: S. Bigelow (Univ. Calif., Santa Barbara), M. Bridson (Imperial College, U.K.), D. Calegari (Caltec), A. Casson (Yale, Principal Lecturer), N. Dunfield (Harvard), C. Gordon (Univ. Texas, Austin), A. Reid (Univ. Texas, Austin), M. Scharlemann (Univ. Calif., Santa Barbara), Z. Sela (Hebrew Univ., Israel), P. Shalen (UIC). J. Weeks will give a special public lecture.

Support: The NSF, with matching funds provided by the Univ. of Arkansas. Applications for support can be made by filling out the form available on the conference website. Priority will be given to students and recent Ph.D.'s. The sooner you apply the more likely it is that we still have support left! Women and minorities are particularly encouraged to participate and apply for support.

Information: See <http://www.uark.edu/depts/mathinfo/activities/SpringLecture/SL2003.html>.

May 2003

* 1-3 (REVISED) **SIAM International Conference on Data Mining**,

Cathedral Hill Hotel, San Francisco, California. (Sept. 2002, p. 999)

Information: Contact: meetings@siam.org. Advances in information technology and data collection methods have led to the availability of large data sets in commercial enterprises and in a wide variety of scientific and engineering disciplines. We have an unprecedented opportunity to analyze this data and extract intelligent and useful information from it. The field of data mining draws upon extensive work in areas such as statistics, machine learning, pattern recognition, databases, and high performance computing to discover interesting and previously unknown information in data.

This conference will provide a forum for the presentation of recent results in data mining, including applications, algorithms, software, and systems. There will be peer reviewed, contributed papers as well as invited talks, tutorials and a panel. Best paper awards will be given for papers in different categories. Proceedings of the conference will be available both online at the SIAM Web site and in hard copy form. In addition, several workshops on topics of current interest will be held on the final day of the conference.

* 2-13 (REVISED) **The Clay Mathematics Institute International Conference and Spring School on Noncommutative Geometry and Applications in Conjunction with the 18th Annual Shanks Lecture**, Vanderbilt University, Nashville, Tennessee.

Description: The meeting will feature a lecture series by A. Connes and several minicourses by leading experts in noncommutative geometry and its applications to physics and geometry. In addition there will be a number of invited research talks and short contributions. Graduate students and postdocs are especially encouraged to participate. We expect that (partial) funding will be available.

Principal Speaker: A. Connes, IHES and College de France.

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 **eight 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/>.

Invited Speakers: J. Bellissard, Georgia Inst. of Tech.; J. Cuntz, Univ. of Muenster; N. Higson, Penn State Univ.; G. Kasparov, Vanderbilt Univ.; A. Konechny, Hebrew Univ.; D. Kreimer, Boston Univ.; H. Moscovici, Ohio State Univ.; M. Pimsner, Univ. of Pennsylvania; M. Rieffel, UC Berkeley; J. Roe, Penn State Univ.; J. Varilly, Univ. de Costa Rica.

Organizers: D. Ellwood, D. Bisch, B. Hughes, G. Kasparov, and G. Yu.

Information: <http://atlas.math.vanderbilt.edu/~shanks/>.

* 14–18 **Complex Systems and Computer Science in Sport**, Barcelona, Spain.

Organizer: INEFC.

Coordinator: N. Balagué.

Information: <http://www-ma1.upc.es/comcom/>.

* 23–26 **Symposium on Analysis and PDEs**, Purdue University, West Lafayette, Indiana.

Short Description: The symposium will focus on recent developments in partial differential equations and geometric measure theory. It will consist of two 5-hour minicourses presented by the principal lecturers, and nine 1-hour lectures given by the invited speakers. There will also be time allocated for contributed talks. The aim of this initiative is, on the one hand, to introduce prospective and young researchers to a larger mathematical community and help them to establish professional connections with key figures in their areas of interest. On the other hand, it will provide an opportunity to summarize some of the most recent progress in the fields, exchange ideas towards the solution of open questions, and formulate new problems and avenues of research.

Principal Lecturers: L. Ambrosio (Scuola Normale Superiore, Pisa, Italy); Sets of finite perimeter, BV functions, and currents in metric spaces; L. Caffarelli (Univ. of Texas at Austin): Some PDEs in periodic media: Minimal surfaces, fully nonlinear equations, and the Monge Ampere equation.

Invited Speakers: Z. Balogh (Univ. of Bern, Switzerland), P. Hajlasz (Univ. of Warsaw, Poland, and Univ. of Michigan), F. Hamel (Univ. of Aix-Marseille III, France), R. Hardt (Rice Univ.), I. Holopainen (Univ. of Helsinki, Finland), K.-A. Lee (Seoul National Univ., Korea), Y. Li (Rutgers Univ.), T. Souganidis (Univ. of Texas at Austin), J. Tyson (Univ. of Illinois at Urbana-Champaign), J. Viaclovsky (MIT).

Contributed Talks: Abstracts for 20-minute contributed talks are welcome and should be received by April 15, 2003. Please use the submission form available at <http://www.math.purdue.edu/~danielli/contributed.html>.

Organizer: D. Danielli (danielli@math.purdue.edu).

Support: Some funds are available to help support the participation of graduate students, postdoctoral faculty, and active senior researchers who do not have grant support. We especially encourage people who belong to currently underrepresented groups (women and minorities) to apply. Application forms are available at <http://www.math.purdue.edu/~danielli/support.htm> and should be received by April 15, 2003.

Information: For further information see: <http://www.math.purdue.edu/~danielli/symposium.html>.

* 25–30 **Third School on Analysis and Geometry in Metric Spaces**, Centro Congressi Panorama in Sardinia, Trento, Italy.

Information: For further information and applications please contact: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento); tel: +39-0461-881628; fax: +39-0461-810629; email: michelet@science.unitn.it; <http://www.science.unitn.it/cirm/annmetric3.html>; <http://www.science.unitn.it/cirm/>.

* 26–28 **Perspectives in Analysis**, KTH, Stockholm, Sweden.

Program: The aim of the conference is to explore perspectives for the future as well as the past in the broad area of analysis. There will be about 15 one-hour talks by world-leading experts, who will present their personal viewpoints on the subject.

Speakers: E. Bombieri, J. Bourgain, R. Coifman, B. Engquist, L. Faddeev, L. Gårding, P. Jones, J.-P. Kahane, E. Lieb, N. Makarov, P. Malliavin, C. McMullen, Y. Sinai, E. Stein, D. Sullivan.

Financial Support: Some local financial support might be available. The information will be posted later on the conference website.

Organizers: M. Benedicks, P. Jones, S. Smirnov.

Information and Arrangements: M. Lundin, email: malund@math.kth.se; fax: 46-8-7231788; <http://www.math.kth.se/perspectives.html>.

* 27–31 (REVISED) **SIAM Conference on Applications of Dynamical Systems**, Snowbird Ski and Summer Resort, Snowbird, Utah. (Sept. 2002, p. 1000)

Information: Contact: meetings@siam.org. The purpose of the SIAG is to bring together researchers working on a variety of problems in dynamical systems and to give them contact with people of similar interests but often different backgrounds. By the establishment of this SIAG, cross-disciplinary interactions will be catalyzed among workers with interests in dynamics ranging from fundamental properties of dynamical systems to the development of software for use in the study of dynamics to applications to disciplines such as physics, chemistry and engineering. Also, the SIAG will foster interactions between the academic community working in dynamics and workers in industrial and government settings.

June 2003

* 2–6 **Complex Analysis and Geometry—XVI**, Grand Hotel Bellavista in Levico Terme, Trento, Italy.

Information: For further information and applications please contact: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento); tel: +39-0461-881628; fax: +39-0461-810629; email: michelet@science.unitn.it; <http://www.science.unitn.it/cirm/>.

* 5–12 **Fifth International Conference on Geometry, Integrability and Quantization**, Sts. Constantine and Elena resort (near Varna), Bulgaria.

Goal: To bring together experts in Classical and Modern Differential Geometry, Complex Analysis, Mathematical Physics and allied fields to assess recent developments in these areas and to stimulate research in related topics.

Organizers: I. M. Mladenov (Sofia), A. Hirshfeld (Dortmund).

Information: I. Mladenov: mladenov@obzor.bio21.bas.bg; A. Hirshfeld: hirsh@physik.uni-dortmund.de; <http://obzor.bio21.bas.bg/conference/>.

* 12–14 **Lehigh University Geometry/Topology Conference**, Lehigh University, Bethlehem, Pennsylvania.

Program: Invited talks and contributed talks in geometry and topology.

Confirmed Speakers: J. Cheeger, R. Lawrence, D. Ravenel, V. Voevodsky.

Organizers: D. Davis, email: dmd1@lehigh.edu; D. Johnson, email: dlj0@lehigh.edu.

Deadlines: For 40-minute contributed talks, May 1. For registration, May 15.

Information: <http://www.lehigh.edu/~dlj0/geotop.html>.

* 15–20 **Advanced School in the Geometry of the Fourier Mukai Transform**, Grand Hotel Bellavista in Levico Terme, Trento, Italy.

Information: For further information and applications please contact: A. Micheletti, Secretary of CIRM, Centro Internazionale per la Ricerca Matematica, Istituto Trentino di Cultura, 38050 Povo (Trento); tel: +39-0461-881628; fax: +39-0461-810629; email: michelet@science.unitn.it; <http://www.science.unitn.it/cirm/>.

- * 17–21 **Second North American Summer School in Logic, Language and Information (NASSLLI-2003)**, Bloomington, Indiana.
Description: The main focus of NASSLLI is on the interface between linguistics, logic, and computation, broadly conceived, and on related fields.
Information: For further information on NASSLLI-2003, visit <http://www.indiana.edu/~nasslli/>.
- * 21 **Logic and Computational Linguistics**, Ottawa, Canada.
Description: The principal aim of this event, an official workshop of LICS 2003, is to introduce the LICS community to problems in computational linguistics in which techniques from logic are helpful and to provide computational linguists with an opportunity to learn more about recent advances in logic.
Invited Speakers: F. Pfenning and M. Steedman.
Information: For further information, contact either of the workshop organizers, L. Libkin (libkin@cs.toronto.edu) or G. Penn (gpenn@cs.toronto.edu).
- * 22–25 (REVISED) **IEEE Symposium on Logic in Computer Science (LICS 2003): Call for Workshop Proposals**, Ottawa, Ontario, Canada. (Dec. 2002, p. 1420)
Description: Researchers and practitioners are invited to submit proposals for workshops on topics relating logic, broadly construed, to computer science or related fields. Funding is available to help defray the costs of a *limited number* of workshops.
Proposals Should Include: (1) A short scientific summary and justification of the proposed topic. This should include a discussion of the particular benefits of the topic to the LICS community. (2) A discussion of the proposed format and agenda. (3) The proposed duration, which may vary from half a day to two days, and preferred dates. (4) Procedures for selecting participants and papers. (5) Expected number of participants. (6) Potential invited speakers. (7) Plans for proceedings or other publications. Proposals are due November 1, 2002, and should be submitted electronically to: P. Panangaden, Workshops Chair LICS'03; email: prakash@cs.mcgill.ca.
Selection Committee: S. Abramsky (LICS General Chair), P. Kolaitis (LICS'03 Program Committee Chair), P. Panangaden (LICS Workshop Chair), and P. Scott and A. Felty (LICS'03 Conference Cochairs). The results will be announced by November 15, 2002.
Invited Speakers: E. Grädel, J. Harrison, M. Kwiatkowska, and J. McCarthy.
Invited Tutorials: M. Abadi and B. Pierce.
Information: <http://www.lfcs.informatics.ed.ac.uk/lics/>.
- * 23–26 **2003 International Multiconference in Computer Science and Computer Engineering**, Monte Carlo Resort, Las Vegas, Nevada.
Description: The 2003 International Multiconference in Computer Science & Computer Engineering is composed of the following 15 conferences (+ workshops). Each event is the premier conference for presentation of advances in its respective subject. All conferences will be held simultaneously (same location & dates: June 23–26, 2003, Las Vegas, USA):
(1) Parallel and Distributed Processing Techniques and Applications (PDPTA'03); (2) Imaging Science, Systems, and Technology (CISST'03); (3) Artificial Intelligence (IC-AI'03); (4) Internet Computing (IC'03); (5) Embedded Systems and Applications (ESA'03); (6) Wireless Networks (ICWN'03); (7) Machine Learning; Models, Technologies and Applications (MLMTA); (8) Mathematics and Engineering Techniques in Medicine and Biological Sciences (METMBS'03); (9) Communications in Computing (CIC'03); (10) Engineering of Reconfigurable Systems and Algorithms (ERSA'03); (11) VLSI (VLSI'03); (12) Information and Knowledge Engineering (IKE'03); (13) Software Engineering Research and Practice (SERP'03); (14) Security and Management (SAM'03); (15) The First International Conference on Web Services (ICWS'03).
Information: H. R. Arabnia, Chair, The 2003 Int'l. Multiconference in CS and CE, The Univ. of Georgia, Dept. of Comput. Sci., 415 Graduate Studies Research Center, Athens, GA 30602-7404; tel: (706) 542-3480; fax: (706) 542-2966; email: hra@cs.uga.edu; <http://www.ashland.edu/~iajwa/conferences/>.
- * 23–26 **Special Track on Agent and Multi-Agent Learning (LAMS)**, Las Vegas, Nevada.
Description: This conference will take place during the 2003 International Conference on Machine Learning; Models, Technologies and Applications.
Information: http://faculty.uaeu.ac.ae/~mshamdi/LAMS_call.html.
- * 23–27 **Integrable Systems & Spectral Curves Conference**, Université de Lille I, Villeneuve d'Ascq, Lille, France.
Description: Under the name Integrable Systems and Spectral Curves many broad themes linked together coexist, ranging from Lie groups and algebras to symplectic and Poisson structures on algebraic varieties, compact Riemann surfaces, partial differential/difference equations, finite-gap Schrödinger operators and Sklyanin algebras. The main goal of the meeting will be to bring together researchers working in such different areas, creating a stimulating environment and providing a good framework for mutual interaction.
Preliminary List of Participants: (*) to be confirmed. M. Audin, A. Beauville (*), R. Donagi, A. El Gradechi, B. Enriquez, G. Felder (*), L. Gavrilov, L. Haine, J. Hurtubise, Y. Kosmann-Schwarzbach, V. Kuznetsov, E. Markman, D. Markushevich, V. Matveev, E. Previato, V. Roubtsov, N. T. Zung, A. Treibich, M. Semenov-Tian-Shansky (*), P. Vanhaecke, P. Van Moerbeke (*).
Local Organizers: D. Markushevich, Univ. de Lille I (markushe@agat.univ-lille.fr); A. Treibich, Univ. d'Artois (treibich@euler.univ-artois.fr).
- * 25–28 (REVISED) **Mathematics in XXI Century**, Novosibirsk University, Novosibirsk, Russia. (Sept. 2002, p. 1000)
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: email: mmf@math.nsc.ru.
Information: <http://mmfd.nsu.ru/fmmf/smmfe/workf/kongres.html>.
- * 26–27 **Fifth International Workshop on Implicit Computational Complexity (ICC 2003)**, Ottawa, Canada.
Description: An official affiliated workshop of LICS 2003, this event aims to further the development of implicit computational complexity and its applications.
Invited Speakers: A. Atserias, E. Grädel, A. Liu, and H. Mairson.
Deadline: For submission of papers is March 28, 2003.
Information: Contact the program chair, A. Dawar (Anuj.Dawar@cl.cam.ac.uk), or visit <http://www.cis.syr.edu/~royer/icc/ICC03/>.

July 2003

- * 1–10 **Advanced Course on Polynomial Identity Rings**, Bellaterra (Barcelona), Spain.
Coordinator: F. Cedó.
Information: <http://www.crm.es/PI-rings/>.
- * 7–11 (REVISED) **ICIAM 2003, 5th International Congress on Industrial and Applied Mathematics**, Sydney, Australia. (Sept. 2002, p. 1000)
Description: The International Congress on Industrial and Applied Mathematics (ICIAM) is held every four years and is the most important general meeting worldwide for applied mathematicians. The congress covers the full spectrum of research topics in applied mathematics and its industrial applications. Plans are based on attracting 2,000 delegates. Features of ICIAM 2003 include

twenty-seven invited speakers, six embedded meetings, hundreds of minisymposia, and three special days (Industry, Education, Community).

Deadlines: Minisymposia proposals will be received until February 28, 2003, by which date complete details (participants, abstracts) must be provided. Abstracts for contributed talks, posters, and embedded meetings will be received until further notice. Expiry of regular registration fee is: March 7, 2003.

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

* 13–28 **Diffiety School—A School in the Geometry of Partial Differential Equations**, S. Stefano del Sole, Avellino, Italy.

Program: Beginner's course: (1) General introduction, (2) Analysis on manifolds and observables, (3) Introduction to differential calculus in commutative algebras. Veteran's course: Modern geometric and homological methods in PDEs (including the elements of secondary calculus) and their applications to integrable systems and equations of mathematical physics.

Lecturers and Tutors: A. De Paris (Univ. "Federico II" di Napoli), S. Igonin (Independent Univ. of Moscow), J. Krasil'shchik (Independent Univ. of Moscow, Diffiety Inst.), A. Verbovetsky (Independent Univ. of Moscow, Diffiety Institute), A. Vinogradov (Univ. di Salerno, Diffiety Institute), M. Vinogradov (Diffiety Institute), R. Vitolo (Univ. di Lecce, Diffiety Inst.).

Organizers: D. Catalano Ferraioli, A. De Paris, C. Di Pietro, G. Manno, R. Piscopo, G. Rotondaro, A. Vinogradov, R. Vitolo.

Deadline: June 10, 2003.

Information: <http://www.diffiety.ac.ru/> or <http://www.diffiety.org/>; email: school@diffiety.org; or write to: A.M. Vinogradov, Dipartimento di Matematica e Informatica, Università degli Studi di Salerno, Via S. Allende 84081 Baronissi (SA), Italy; tel: +39 089 965 395; fax: +39 089 965 438.

* 14 or 15 **The First International Workshop on Programming Multi-Agent Systems: Languages, Frameworks, Techniques and Tools (PROMAS 2003)**, Melbourne, Australia.

Topics: Main topics include but are not limited to the following: Agent programming languages; Frameworks, techniques and tools for MAS programming; Extensions of traditional languages for MAS programming; Operational semantics for MAS based on process algebra, transition systems, logic, etc.; Verification tools for MAS implementations; Computational concepts for MAS applications; Application areas for MAS programming languages; Benchmarks and testbeds for comparing MAS programming languages; Generic tools for implementing and coordinating agent wrappers; Programming mobile agents.

Information: Workshop cochairs: A. El Fallah Seghrouchni, Univ. of Paris 6 (Pierre et Marie Curie), France, email: Ama1.Elfallah@lip6.fr; M. Dastani, Utrecht Univ., The Netherlands, email: mehdi@cs.uu.nl; D. Kinny, Agentis Software, Australia, email: dnk@agentis.net; J. Dix, Manchester Univ., United Kingdom, email: dix@cs.man.ac.uk; <http://www.cs.uu.nl/ProMAS/>.

* 14–18 **DALT 2003: First International Workshop on Declarative Agent Languages and Technologies**, Melbourne, Australia.

Description: In conjunction with AAMAS 2003, 2nd International Conference on Autonomous Agents and Multi-Agent Systems (<http://www.aamas-conference.org/>). Agent metaphors and technologies are ever more adopted to harness and govern the complexity of today's systems. As a consequence, the growing complexity of agent systems calls for models and technologies that promote system predictability and enable feature discovery and verification. Recent advances in the area of logics and formal methods make declarative languages and technologies a mostly promising approach to the modeling and engineering of complex agent systems.

Information: <http://centria.di.fct.unl.pt/~jleite/dalt03/index.htm>.

* 21–24 **Mathematical Problems in Quantum Mechanics**, Departamento de Matemática Instituto Superior Técnico, Lisboa, Portugal.

Program: This is a satellite meeting of the XIV International Congress on Mathematical Physics (Lisbon, July 28–August 2, 2003). The meeting will focus on topics such as Dirac and Pauli operators, many-body systems, quantum waveguide systems and spectral geometry. It will consist of several 50-minute invited lectures, together with 20-minute contributed sessions.

Organizers: P. Exner (Prague), P. Freitas (Lisbon), and J. P. Solovej (Copenhagen).

Deadlines: Submissions for the contributed sessions should be sent to one of the organizers before April 30, 2003.

Information: <http://www.math.ist.utl.pt/~pfreitas/mpqm/mpqm.html>.

* 23–25 **The Joint Meeting of ISAMA 2003 and the 6th Annual BRIDGES Conference**, University of Granada, Spain.

Description: The joint meeting will be followed by a one-day special conference tour, "The Beauty and Mathematics of the Alhambra", on July 26, 2003.

Information: For information about location, accommodations, registration, and paper guidelines, you may visit: <http://www.sckans.edu/~bridges/>.

* 25–26 **Young Researchers Symposium of ICMP2003**, Instituto Superior Técnico (IST), Lisbon, Portugal.

Program: Plenary lectures in the morning (introductory and pedagogical lectures designed for the training of young researchers). Sessions with contributed talks of young participants in the afternoon.

Confirmed Main Speakers: M. Aizenman (Princeton), J. Baez (Riverside), V. F. R. Jones (Berkeley), M. Loss (Atlanta), Yu. Manin (Bonn), M. Marino (Harvard), Y. G. Sinai (Princeton).

Information: The YRS is part of the ICMP program, but it is possible to take part only in the YRS and without any age restriction. For further information please visit <http://icmp2003.net/>.

* 28–August 2 **XIV International Congress on Mathematical Physics**, University of Lisbon, Portugal.

Description: This is the XIV International Congress on Mathematical Physics, held every three years. There will be plenary invited talks and twelve sessions on: Dynamical systems, Integrable systems and random matrix theory, Condensed matter physics, Equilibrium statistical physics, Quantum field theory, Operator algebras and quantum information, String and M theory, Fluid dynamics and nonlinear PDEs, General relativity, Nonequilibrium statistical mechanics, Quantum mechanics and spectral theory, Path integrals and stochastic analysis.

Each session consists of 3 hours of invited talks. There is a poster session associated with each session. Some posters will be selected to be presented as talks.

Confirmed Plenary Speakers: E. Carlen (Atlanta), A. Chenciner (Paris), M. J. Esteban (Paris), K. Fredenhagen (Hamburg), K. Gawedzki (Lyon), I. Krichever (New York), R. V. Smirnov (Stockholm), J. P. Solovej (Copenhagen), V. Schomerus (Posdam), C. Villani (Lyon), D. Voiculescu (Berkeley).

Local Organizing Committee: A. Bivar (Univ. Lisbon), B. Cabral (Univ. Lisbon), A. Cannas (IST Lisbon) M. C. Carvalho (Univ. Lisbon), A. B. Cruzeiro (IST Lisbon), F. Duarte Santos (Univ. Lisbon), R. L. Fernandes (IST Lisbon), P. Freitas (IST Lisbon), V. Konotop (Univ. Lisbon), M. Mackaay (Univ. Algarve), L. T. Magalhaes (IST Lisbon), N. Manojlovic (Univ. Algarve), J. Mourão (IST Lisbon), O. Neto (Univ. Lisbon), A. Nunes (Univ. Lisbon), J. A. Perdigão Dias da Silva (Univ. Lisbon), R. Picken (IST Lisbon), J. Rezende (Univ. Lisbon), L. Streit (Univ. Madeira), J. N. Tavares (Univ. Oporto), R. Vilela Mendes (IST Lisbon), J. C. Zambrini (Univ. Lisbon).

Deadline: For the submission of abstracts of posters: April 26, 2003.

Information: Available on our website: <http://icmp2003.net/>.

August 2003

- * 3-9 **The Third International Conference: Creativity in Mathematics Education and the Education of Gifted Students (ICME&EGS'03)**, Rousse, Bulgaria.

Program Structure: The main aim of the conference is to formulate the problem and globally define the direction of the development of creative mathematics education of gifted students on the basis of contemporary realia (educational systems, culture, technologies, etc.); and positive practices, theories, and research results.

Information: ICME&EGS, Organizing Committee (Vice-President of OC: E. A. Velikova), The University of Rousse, 8 Studentska str., 7017 Rousse, Bulgaria; cell phone: (+359) 88 97 13 17; fax: (+359) 82 84 57 08; email: conf_orgcom@ami.ru.acad.bg or emily@ami.ru.acad.bg; <http://www.cmeegs3.rousse.bg/> or <http://www.ami.ru.acad.bg/conference2003/>.

- * 11-15 **Workshop on Finsler Geometry and Its Applications**, Debrecen, Hungary.

Program: The scientific program is devoted to lectures given by the participants on various fields of Finsler geometry, their generalizations, and applications in physics, biology, control theory, finance, psychometry, etc. The priority themes will be given in the Second Announcement. This event is intended to continue the series of workshops on Finsler geometry (Seattle 1995, Edmonton 1998, Iasi 2001, Berkeley 2002) and the Finsler Symposiums held yearly in Japan.

Advisory Board: P. Antonelli (Edmonton, Canada); G. S. Asanov (Moscow, Russia); D. Bao (Houston, USA); S. S. Chern (Tianjin, China); P. Foulon (Strasbourg, France); R. S. Ingarden (Torun, Poland); R. Miron (Iasi, Romania); G. Patrizio (Firenze, Italy); Z. Shen (Indianapolis, USA); H. Shimada (Sapporo, Japan); Z. I. Szabo (New York, USA); L. Tamassy (Debrecen, Hungary).

Organizers: S. Bacso, L. Kozma, and J. Szilasi.

Information: <http://www.math.klte.hu/finsler/>.

September 2003

- * 8-12 **Eurocomb'03-European Conference on Combinatorics, Graph Theory and Applications**, Prague, Czech Republic.

Topic: Combinatorics and Graph Theory. The conference concentrates mainly on four areas: algebraic, algorithmic, geometric, and probabilistic combinatorics, including their applications to other areas of mathematics, computer science and engineering. During the symposium the European Prize in Combinatorics will be awarded.

Information: <http://kam.mff.cuni.cz/~ecombo3/>.

- * 11-14 **Logic, Game Theory and Social Choice 3**, University of Siena, Certosa di Pontignano, Siena, Italy.

Description: Following LGS1 (Tilburg 1999) and LGS2 (St. Petersburg 2001), LGS3 will bring into focus the developing theoretical connections between logic and game theory, game theory and social choice, and logic and social choice. The conference program will consist of invited lectures and contributed papers. Submissions of contributed papers are invited. Papers focussing on connections between the relevant disciplines are especially encouraged by the program committee.

Deadline: Submissions should be received before March 31, 2003.

Topics: The topics of LGS3 include, but are not limited to, Logic and Game Theory: game semantics, information flow in games, knowledge representation in games, category-theoretic and recursion-theoretic methods in game theory; Game Theory and Social Choice: implementation, coalition formation, strategy-proofness; Social Choice and Logic: rights-systems modelling, uses of deontic and fuzzy logics in social choice theory, category-theoretic

and recursion-theoretic methods in social choice; concerning applications, some relevant examples are: strategic properties of decision processes and procedures, complexity of decision procedures, evolution of collective decision rules, characterization and assessment of influence in strategic networks, coalition formation in political/economic decision making.

Invited Speakers: J. M. Hyland (Univ. of Cambridge, UK), B. Monjardet (Univ. de Paris 1), D. Samet (Univ. of Tel Aviv), J. Van Benthem (Univ. of Amsterdam and Stanford Univ.).

Information: Further information on LGS3, including submissions, participation fees, and accommodations will be made available in due course at the conference website, <http://www.econ-pol.unisi.it/lgs3/>.

- * 12-14 **EMS Mathematical Weekend**, Gulbenkian Foundation, Lisbon, Portugal.

Plenary Speakers: M. Audin (Strasbourg), J.-M. Bismut (Orsay), B. Dacorogna (Lausanne), H. Foellmer (Berlin), G. Lebeau (Nice).

Special Sessions: Symplectic and Related Geometries, Analysis and Geometry, Calculus of Variations, Stochastic Analysis and Mathematical Finance, Non-linear Evolution Equations

Organizer: European Mathematical Society and the Portuguese Mathematical Society

Local Organizers: A. Bela Cruzeiro, A. Cannas da Silva, P. Freitas, R. Loja Fernandes and J. Matias (IST-Lisbon).

Information: <http://www.math.ist.utl.pt/ems/>; phone: 351 218 417 113; fax: 351 218 417 598; email: rfern@math.ist.utl.pt; <http://www.math.ist.utl.pt/~rfern/>.

October 2003

- * 20-25 **International Symposium of Mathematics, Analysis and Probability**, Hammamet, Tunisia.

Scientific Program: Analysis on Variety, Harmonic Analysis, Infinite Dimensional Analysis, Stochastic Analysis and Applications, Non-commutative and Quantum Probability, Random Walk, Brownian Motion.

Organizer: The symposium is organized in association with the French Mathematical Society (SMF) and the Tunisia Mathematical Society (SMT).

Scientific Committee: J.-P. Anker, D. Bakry, J. Bertoin, Ph. Biane, Ph. Bougerol, H. Chebli, J.-L. Clerk, J. Faraut, K. Harzallah, H. Ouerdiane, J.-J. Risler, K. Trimeche.

Organizing Committee: Ph. Biane, R. Boukhris, R. Hachaichi, R. Gannoun, H. Ouerdiane, H. Sadraoui, L. Silva, F. Ballalouna.

Invited Speakers: L. Accardi, S. Albeverio, A. Ancona, M. Babilot, D. Békollé, B. Farah, H. B. Massoud, P. Carmona, L. Gallardo, A. Guionnet, Y. Guivarc'h, T. Hida, Y. Hu, N. Kammoun, V. Kaimanovich, M. S. Khalgui, P. Krée, Y. J. Lee, P. Malliavin, K. Mokni, S. Mustapha, D. Nualart, N. Obata, N. O'Connell, Y. Ouknine, M. Roeckner, B. Roynette, C. Sabot, Z. Shi, A. S. Sznitman, A. Touati, C. Vilani, D. Voiculescu, W. Werner, J. A. Yan, M. Yor, A. Zuk.

Information: P. Biane, DMA-Superior Normal School 45, ulm street, 75230 Paris Cedex 05, France; tel: + 33 (0)1 44 32 20 39; fax: + 33 (0)1 44 32 20 80; email: Philippe.Biane@ens.fr; or H. Ouerdiane, Dept. of Math., Faculty of the Sciences of Tunis, Campus universitaire, 1060 Tunis, Tunisia; fax: + 216 1 885 350; email: habib.ouerdiane@fst.rnu.tn.

November 2003

- * 3-8 **IV International Colloquium on Differential Equations and Applications**, Maracaibo, Venezuela.

Topics: This meeting will include topics in Discrete Dynamical Systems, Control Theory, Stochastic Differential Equations, Nonlinear Optimization Methods, Fluid Mechanics, and Numerical Analysis. In addition to contributed talks, the program also includes a course on Semilinear Evolution Equations by Prof. Anibal Rodríguez Bernal from the Complutense University of Madrid.

Deadline: The deadline for receipt of paper proposals in LaTeX is April 30th, 2003. Notification of acceptance will be given before May 30th, 2003. Full manuscripts from the selected abstracts are expected by no later than August 1st 2003. Each paper submitted will be peer reviewed by the Technical and Program Committee.

Information: For additional information contact A. D. Rueda, or J. G. Matamala email: ivceda@luz.ve.

December 2003

* 15–19 **The 8th Asian Technology Conference in Mathematics**, Chung Hua University, Hsin-Chu, Taiwan.

Aim: To provide an interdisciplinary forum for teachers, researchers, educators and decision makers around the world in the fields of mathematics and mathematical sciences. It will also provide a venue for researchers and developers of computer technology to present their results in using technology in both basic research and pedagogical research and to exchange ideas and information on their latest developments. The conference will cover a broad range of topics on the relevancy of technology in mathematical research and teaching.

Topics: Mathematics for information technology; Geometry using technology; Computer algebra; Internet technology for mathematics; Machine learning, theorem proving and games; Multimedia distance learning; Graphics calculators; Mathematical research and teaching using technology; Physics research and teaching using technology; Applications in mathematical sciences using technology; Mathematical software and tools on the WWW; Assessment of implementation of technology in education; Integrating technology into mathematics education; Mathematics learning and cognition; Childhood mathematics learning.

Information: Please visit <http://www.atcminc.com/>.

January 2004

* 9–10 **2003-04 ASL Winter Meeting (with Joint Mathematics Meetings)**, Phoenix, Arizona.

Program Committee: T. McNicholl, I. Neeman, and C. Wood (chair).
Information: Email: asl@vassar.edu.

* 21–30 **Advanced Course on Ramsey Methods in Analysis**, Bellaterra (Barcelona), Spain.

Coordinator: J. Bagaria.

Information: <http://www.crm.es/RamseyMethods/>.

February 2004

* 2–13 **Advanced Course on Contemporary Cryptology**, Bellaterra (Barcelona), Spain.

Coordinator: P. Morillo.

Information: <http://www.crm.es/ContemporaryCryptology/>.

* 8 **IMA Tutorial: Robustness and the Internet: Design, Evolution, and Theoretical Foundations**, University of Minnesota, Minneapolis, Minnesota.

Organizers: W. Willinger (AT&T), J. Doyle (Caltech).

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

* 9–13 **IMA Workshop 5: Robustness in Complex Systems**, University of Minnesota, Minneapolis, Minnesota.

Organizers: W. Willinger (AT&T), J. Doyle (Caltech).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/winter/c5.html>.

March 2004

* 7 **IMA Tutorial: Control and Pricing in Communication and Power Networks**, University of Minnesota, Minneapolis, Minnesota.

Organizers: C. L. DeMarco (Wisconsin-Madison), F. P. Kelly (Cambridge), T. G. Kurtz (Wisconsin-Madison), R. J. Williams (San Diego).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/winter/t4.html>.

* 8–13 **IMA Workshop 6: Control and Pricing in Communication and Power Networks**, University of Minnesota, Minneapolis, Minnesota.

Organizers: C. L. DeMarco (Wisconsin-Madison), F. P. Kelly (Cambridge), T. G. Kurtz (Wisconsin-Madison), R. J. Williams (San Diego).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/winter/c6.html>.

* 29–April 2 **IMA Short Course: Tools for Modeling and Data Analysis in Finance/Asset Pricing**, University of Minnesota, Minneapolis, Minnesota.

Organizers: M. Avellaneda (NYU), P. P. Carr (NYC).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/spring/sc2.html>.

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

April 2004

* 12–16 **IMA Workshop 7: Risk Management and Model Specifications Issues in Finance**, University of Minnesota, Minneapolis, Minnesota.

Organizers: M. Avellaneda (NYU), R. Cont (École Polytechnique).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/spring/c7.html>.

May 2004

* 3–7 **IMA Workshop 8: Model Implementation, Algorithms and Software Issues**, University of Minnesota, Minneapolis, Minnesota.

Organizers: J. Langsam (Morgan Stanley), G. Papanicolaou (Stanford).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/spring/c8.html>.

* 24–28 **IMA Workshop 9: Financial Data Analysis and Applications**, University of Minnesota, Minneapolis, Minnesota.

Organizers: J. Heaton (Chicago), A. Lo (MIT).

Information: Institute for Mathematics and its Applications, University of Minnesota, 207 Church St. SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu; <http://www.ima.umn.edu/complex/spring/c9.html>.

June 2004

* 2004 **Mathematical Foundations of Learning Theory**, Barcelona, Spain.

Coordinator: G. Lugosi.

Information: <http://www.crm.es/MathematicalFoundations/>.

* 2004 WSEAS Conferences, Corfu Island, Greece.

Topics: 7th WSEAS Int. Conf. on Circuits, 7th WSEAS Int. Conf. on Systems, 7th WSEAS Int. Conf. on Communications, 7th WSEAS Int. Conf. on Computers.

Topics for Conferences at Rhodes Island, Greece: 3rd WSEAS Int. Conf. on Applied Informatics and Communications (AIC'03); 3rd WSEAS Int. Conf. on Signal Processing, Computational Geometry & Artificial Vision (ISCGAV'03); 3rd WSEAS Int. Conf. on Systems Theory and Scientific Computation (ISTASC'03) (former: Scientific Computation and Soft Computing).

Information: For more details and to contact us, see the website <http://www.wseas.org/>.

July 2004

* 5-16 Advanced Course on Automata Groups, Bellaterra (Barcelona), Spain.

Coordinator: W. Dicks.

Information: <http://www.crm.es/AutomataGroups/>.

* 26-31 2004 ASL European Summer Meeting (Logic Colloquium '04), Torino, Italy.

Program Committee: T. Arai, D. DeJongh, W. Goldfarb, G. Hjorth, S. Lempp, G. Lolli, D. Marker, D. Martin, R. McKenzie, W. Pohlers (chair), W. Sieg, A. Sorbi, and A. Wilkie.

Local Organizing Committee: A. Andretta (chair), S. Berardi, R. Camerlo, U. De Liguoro, M. Dezani, A. Marcone, N. Olivetti, and D. Zambella.

Information: F. Whitney; email: asl@vassar.edu.

August 2004

* 2-27 Magnetic Reconnection Theory, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.

Description: The basic theory of MHD reconnection in two dimensions is now well developed, and the time is ripe for two new developments, which are the main aims of the programme, namely, to develop: (i) the theory for the way the process can operate in three dimensions; (ii) models for the various aspects of collisionless reconnection. We would envisage having two short workshops, an introductory one at the beginning to set the scene and one at the end to present the results and stimulate further work. There would be a series of brainstorming sessions on various key topics throughout the 4 weeks, with the emphasis on the sharing of ideas and genuine cross-fertilization. For the whole 4 weeks. In addition, the groups would have been prepared by a series of email debates amongst the participants in the months leading up to the programme, so that the members will be well prepared and ready to hit the ground running when they arrive.

Organizers: E. R. Priest (St. Andrews), J. Birn (Los Alamos), T. G. Forbes (New Hampshire).

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH UK; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; email: info@newton.com.ac.uk; <http://www.newton.cam.ac.uk/>.

* 16-December 17 Quantum Information Science, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.

Organizers: C. H. Bennett (IBM Yorktown), D. P. DiVincenzo (IBM Yorktown), N. Linden (Bristol), S. Popescu (Bristol).

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH UK; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; email: info@newton.com.ac.uk; <http://www.newton.cam.ac.uk/>.

* 30-September 3 9th Conference on Differential Geometry and Its Applications, Prague, Czech Republic.

Organizer: Faculty of Mathematics and Physics of Charles University in collaboration with other Czech universities.

Information: email: jbures@karlin.mff.cuni.cz.

January 2005

* 17-July 15 Model Theory and Applications to Algebra and Analysis, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.

Description: Pure model theory. We expect further developments in the use of stability theory techniques in unstable contexts (simple theories, algebraically closed valued fields) and in nonelementary classes.

Model theory of fields with operators, and connections with arithmetic geometry. The model theory of differentially closed fields and of other fields with operators has been at the centre of model-theoretic proofs of results in arithmetic geometry. The Zil'ber programme of pseudo-analytic functions is also expected to have some interesting consequences.

O-minimality and related topics. O-minimality is a property of ordered structures, yielding results akin to traditional real analytic results, such as the classical finiteness theorems for subanalytic sets (cell decompositions, Whitney stratifications, etc.). Mathematically central, new examples of o-minimal structures have emerged, and the logical theory has had applications to Lie theory, to asymptotics, and to neural networks.

Henselian fields. Model theory of Henselian fields, and in particular of p -adic fields and Arc spaces. Connections with algebraic and analytic geometry. Study of cohomology theories and motives, aiming at uniformity results. Study of compact complex manifolds and uses of stability.

Model theory of groups. We plan to have a workshop on groups of finite Morley rank, a topic connected to the Classification of finite simple groups via its techniques and its aims. The recent (and very exciting) developments in the model theory of nonabelian free groups should also be studied, depending on its degree of maturity.

Organizers: Z. Chatzidakis (Paris), A. Pillay (Illinois), A. Wilkie (Oxford).

Information: Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge, CB3 0EH UK; tel: +44 (0) 1223 335999; fax: +44 (0) 1223 330508; email: info@newton.com.ac.uk; <http://www.newton.cam.ac.uk/>.