
Mathematics Calendar

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

October 2003

- * 1–5 **The First International Conference on p-Adic Mathematical Physics, p-ADIC MATHPHYS.2003**, Steklov Mathematical Institute, Moscow, Russia.

Description: p-Adic mathematical physics is a quickly developing area with numerous applications in different fields ranging from quantum theory to disordered and chaotic systems to molecular biology and information science. The aim of this conference is to present recent results in p-adic mathematical physics, related fields, and applications, as well as to discuss earlier results and possible future directions of investigation.

Scope: p-Adic quantum mechanics, string theory, and field theory; Planck scale physics, quantum cosmology; p-adic dynamical systems and stochastic processes; p-adic methods in spin glasses, disordered and chaotic systems, mesoscopic systems and molecular dynamics, molecular biology, information and computer science; non-archimedean and noncommutative geometry; p-adic mathematical physics and number theory, (Riemann) zeta-functions, algebraic geometry, motives, representation theory, spectral theory, functional analysis.

Organizing Committee: B. Dragovich (Yugoslavia), A. Khrennikov (Sweden), A. N. Kochubei (Ukraine), S. V. Kozyrev (Secretary, Russia), V. S. Vladimirov (Cochairman, Russia), I. V. Volovich (Cochairman, Russia).

Information: Titles and abstracts can be submitted to scientific secretary S. V. Kozyrev, kozyrev@mi.ras.ru. Further information is available on the website <http://www.mi.ras.ru/~volovich/>.

- * 7–9 **DIMACS Workshop on Computer-Aided Design and Manufacturing**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Description: Computer-aided design and manufacturing (CAD/CAM) is concerned with all aspects of the process of designing, prototyping, manufacturing, inspecting, and maintaining complex geometric objects under computer control. As such, there is a natural synergy between this field and computational geometry (CG), which involves the design, analysis, implementation, and testing of efficient algorithms and data representation techniques for geometric entities such as points, polygons, polyhedra, curves, and surfaces. On the one hand, CG can bring about significant performance improvements in CAD/CAM, while on the other hand, CAD/CAM can be a rich source of interesting new problems that provide new impetus do research in CG. Indeed, such two-way interaction has already been witnessed in recent years in areas such as numerically controlled machining, casting and injection molding, rapid prototyping and layered manufacturing, metrology, and mechanism/linkage design, to name just a few.

The purpose of this workshop is to further promote this interaction by bringing together researchers from both sides of the aisle to assess the current state of work at the interface of the two fields, to identify research needs, and to establish directions for collaborative future work. A combination of invited talks, contributed papers, and a panel discussion is envisioned.

Topics to be addressed include, but are not limited to, geometric aspects of manufacturing processes (from traditional machining to layered manufacturing to nanoscale manufacturing), process planning and control, rapid prototyping technologies, computational metrology and tolerancing, geometric problems in mechanism design, geometric constraint systems, geometric modeling related to manufacturing, computer vision and robotics related to manufacturing, and geometric issues in standards development.

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/>.

Organizers: D. Dutta, Univ. of Michigan, Ann Arbor, email: dutta@engin.umich.edu; R. Janardan, Univ. of Minnesota, Minneapolis, email: janardan@cs.umn.edu; M. Smid, Carleton Univ., email: michiel@scs.carleton.ca.

How to Participate: Authors are invited to submit abstracts for talks to be given at the workshop. Please email michiel@scs.carleton.ca an abstract (of up to 2 pages) and a draft of a paper (if available), preferably in PDF format.

Submission of material that will also be submitted to (or is to appear in) a refereed conference or journal is allowed and encouraged. After the workshop, the organizers plan to invite high-quality papers, previously unpublished, for inclusion in the AMS-DIMACS series (<http://dimacs.rutgers.edu/Volumes/>).

Deadlines (new dates): Submissions due: August 13, 2003. Acceptance notification: By August 27, 2003.

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

- * 18–22 **Workshop and Conference on Logic, Algebra, and Arithmetic**, Institute for Studies in Theoretical Physics and Mathematics, Tehran, Iran.

Workshop Topics: The focus of the meeting is on mathematical logic and its applications in algebra and arithmetic.

Workshop Program: The opening will take place on the morning of Saturday, October 18. The scientific activities will start right after and will last until the afternoon of Wednesday, October 22. Details of the program will be announced later.

Deadlines: September 3 for receiving abstracts of contributed papers. September 10 for receiving requests for local support. September 17 for receiving completed registration forms.

Confirmed Invited Speakers: L. van den Dries (Univ. of Illinois at Urbana-Champaign, USA); A. Enayat (American Univ., Washington, DC, USA); Y. L. Ershov (Sobolev Inst. of Math., Russia); I. Kalantari (Western Illinois Univ., USA); F.-V. Kuhlmann (Univ. of Saskatchewan, Canada); S. Kuhlmann (Univ. of Saskatchewan, Canada); A. Macintyre (Univ. of Edinburgh, UK); A. Pillay (Univ. of Illinois at Urbana-Champaign, USA); A. Visser (Univ. Utrecht, the Netherlands).

Organizers: S. Mohammad Bagheri (IPM and Tarbiat Modarres Univ., Iran); A. Enayat (American Univ., Washington, DC, USA); I. Kalantari (Western Illinois Univ., USA); M. J. A. Larijani (IPM, Iran); M. Moniri (IPM and Tarbiat Modarres Univ., Iran); M. Moniri (IPM and Shahid Beheshti Univ., Iran), Coordinator; M. Pourmahdian (IPM and Amir Kabir Univ. of Technology, Iran). With the help of: G. B. Khosrovshahi (head of School of Math. of IPM).

Information: <http://www.ipm.ac.ir/logic2003>.

- * 20–22 **Mini-Conference and Workshop on Concentration Phenomenon, Transformation Groups, and Ramsey Theory**, University of Ottawa, Ontario, Canada.

Description: The workshop, sponsored by The Fields Institute, will consist of a series of lectures concerning dynamics and geometry of “large infinite-dimensional” groups, in particular interactions between the phenomenon of concentration of measure on high-dimensional structures, actions of large groups on compact spaces, and combinatorial Ramsey-type results. The lectures will presume no particular background and are intended to bring researchers and graduate students up to date on the latest developments. There will also be an open problem discussion session and possibly a session for short contributed talks. Send expressions of interest to V. Pestov at vpest283@science.uottawa.ca.

Lecturers: T. Giordano (Ottawa), E. Glasner (Tel-Aviv Univ.), V. Milman (Tel-Aviv Univ.), S. Solecki (Univ. of Illinois), S. Todorcevic (Paris VII), V. V. Uspenskij (Ohio Univ.), A. M. Vershik (St. Petersburg), and B. Weiss (Hebrew Univ.).

Organizers: T. Giordano, D. Handelmann, V. Pestov.

Funding: Funding support is available for graduate students to partially cover local expenses and travel. Some funding may also be available to postdocs depending on budget constraints.

Information: <http://www.fields.utoronto.ca/programs/scientific/03-04/cgr/>.

- * 30–31 **DIMACS Workshop on Data Mining Techniques in Bioinformatics**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Description: In recent years high-throughput experimental methods in molecular biology have resulted in enormous amounts of data, both in terms of volume and in terms of new types of data. In addition to complete genome sequences, we have gene expression data, protein structural data, protein-protein interaction data, and protein-DNA interaction data. Data mining techniques will play a large role in analyzing and integrating these large biological datasets, as well as in discovering the biological processes underlying these data.

The goal of this workshop is to bring together researchers in both data mining and bioinformatics, with the aim of exploring new techniques and insights for deciphering biological databases.

Organizers: M. Singh, Princeton Univ., mona@cs.princeton.edu; M. Gerstein, Yale Univ., Mark.Gerstein@yale.edu.

Local Arrangements: M. Mercado, DIMACS Center, mercado@dimacs.rutgers.edu, 732-445-5928.

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

November 2003

- * 3–6 **IMA Hot Topics Workshop: Agent Based Modeling and Simulation**, Institute for Mathematics & its Applications (IMA), University of Minnesota, Minneapolis, Minnesota.

Organizers: F. Castiglione (CNR, Italy), J. Cullum (Los Alamos National Laboratory), S. Eubank (Los Alamos National Laboratory), J. Kephart (IBM), (Marathe M. Los Alamos National Laboratory), Z. Toroczka (Los Alamos National Laboratory).

Contact: Inst. for Math. and its Appl., Univ. of Minnesota, 207 Church St., SE, 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu.

Information: <http://www.ima.umn.edu/complex/fall/agent.html>.

- * 6–8 **Mathematical and Computational Modeling of Biological Systems**, Texas Tech University, Lubbock, Texas.

Description: A minisymposium on Mathematical and Computational Modeling of Biological Systems will be held November 6–8, 2003, at Texas Tech University. The objective of the minisymposium is to bring together some of the most distinguished members and outstanding early-career scholars in mathematical sciences and biomedical engineering who have contributed extensively to the central theme. These scholars will deliver lectures, with the expectation of providing members of the mathematical and engineering community an opportunity to learn about new research venues. In addition, the invited speakers will host panel sessions designed to afford the participants a chance to ask questions and to interact personally with the invited speakers. This minisymposium is highly multidisciplinary and will provide a forum for the exposure and exchange of ideas, methods, and results in the underlying theme of the conference. The conference program will initiate new collaborations between mathematics and all areas of science, engineering, and science education.

Speakers: The distinguished speakers who have accepted our invitation to deliver the keynote lectures for this minisymposium are: J. Humphrey, Texas A&M Univ.; J. Keener, Univ. of Utah; M. Reed, Duke Univ.; A. Sherman, National Institute of Health; C. Taylor, Stanford Univ. The outstanding early-career speakers who have committed to participate include: T. Jackson, Univ. of Michigan; M. S. Olufsen, North Carolina State Univ.

Organizer: P. Seshaiyer, Texas Tech Univ.

Sponsor: The minisymposium is primarily sponsored with the generous support of the National Science Foundation, the Whitaker Foundation, Prof. Frits Ruymgaart Paul Whitfield Endowed Horn Professorship, and by the Department of Mathematics and Statistics.

We are soliciting applications from senior undergraduate students, graduate students, postdoctoral students, and early-career scientists in applied mathematics and bioengineering to participate in the workshop. All selected participants will receive local and travel expenses (including airfare, local room and board). An online application is available on the website listed below, and applications must be received by September 10, 2003, for full consideration.

Information: <http://www.math.ttu.edu/~padhu/red03.html>;
email: padhu@math.ttu.edu.

* 20–21 **First Northeast Probability Seminar**, CUNY Graduate Center, New York, New York.

Invited Speakers: N. Eisenbaum (Univ. Paris VI), J. Fill (Johns Hopkins Univ.), Y. Xiao (Michigan State Univ.), and O. Zeitouni (Univ. of Minnesota, and Technion).

Organizers: I. Hueter and J. Verzani.

Information: <http://www.math.csi.cuny.edu/probability/NortheastProbabilitySeminar/>.

December 2003

* 11–16 **Conference on Algebra and Number Theory**, The University of Hyderabad, India.

Organizing Committee: M. S. Raghunathan (Chairman), T. Amaranath, J.-P. Colliot-Thelene, V. K. Murty, R. Parimala, D. Prasad, V. Suresh, and R. Tandon.

Organizing Secretary: R. Tandon.

Information and Applications: A list of conference speakers and other details are provided on our website: <http://www.uohyd.ernet.in>. Applications (by email) are invited from the international mathematical community to attend the conference. The organizers cannot support the travel of any participants but can support the boarding and lodging of a limited number of participants. Please send your applications to rtsm@uohyd.ernet.in.

January 2004

* 12–17 **Winter School on Transport Equations and Control Theory for PDEs**, Casa della Gioventù, Bressanone (Bolzano), Italy.

Aim and Scope: The aim of the school is to provide a broad and up-to-date introduction to two vital areas of research in partial differential equations (PDEs) that have received increasing attention in the past few years: the study of transport equations with irregular coefficients and the theory of control problems for (linear and nonlinear) hyperbolic equations. The school is addressed to Ph.D. students as well as to postdoctoral and active researchers who have experience or are interested in these areas of PDEs and control theory.

Program: Two courses (of about 10–12 hours each) will be delivered: F. Bouchut, École Normale Supérieure, Paris: “An introduction to the theory of linear transport equations”; R. Triggiani, Univ. of Virginia: “An introduction to control theory for hyperbolic PDEs”. There will also be a few invited lectures (of one hour each) on topics related to the courses.

Organizing Committee: F. Ancona (Univ. of Bologna), S. Bianchini (IAC-CNR, Roma), R. M. Colombo (Univ. of Brescia), A. Marson (Univ. of Padova).

Information: <http://www.math.unipd.it/~marson/GNAMP/WinterSchool>. Participants are recommended to register according to the modalities reported on the website. No registration fee is required.

Contacts: A. Marson, Dipartimento di Matematica Pura ed Applicata, Via G. Belzoni 7, I-35131 Padova, Italy; phone: ++39 049 8275945, fax: ++39 049 8275892; email: marson@math.unipd.it; <http://www.math.unipd.it/~marson>. F. Ancona, Dipartimento di Matematica and C.I.R.A.M., Via Saragozza 8, I-40123 Bologna, Italy; phone: ++39 051 2093906; fax: ++39 051 582528; email: ancona@ciram.unibo.it; <http://www.ciram.unibo.it/ancona>.

March 2004

* 15–19 **Workshop on Nonlinear Wave Equations**, The Fields Institute, Toronto, Ontario, Canada.

Organizing Committee: C. Bardos, J. Colliander, W. Craig (Chair), N. Ercolani, C. Sulem.

Information: http://www.fields.utoronto.ca/programs/scientific/03-04/pde/nonlinear_wave/index.html.

* 29–April 2 **Workshop on Kinetic Theory**, The Fields Institute, Toronto, Ontario, Canada.

Organizing Committee: D. Levermore, Th. Passot, C. Sulem (Chair), P. L. Sulem.

April 2004

* 2–4 **Midwest Several Complex Variables Meeting**, University of Western Ontario, London, Ontario, Canada.

Description: In conjunction with the department’s annual Distinguished Lecture Series, given by Y.-T. Siu, Harvard University, April 1–3, 2004.

Organizers: D. Coman, F. Larusson, E. Poletsky.

Information: <http://www.math.uwo.ca/~larusson/scv.html>.

* 5–8 **Joint Meeting of the 56th British Mathematical Colloquium and the 17th Annual Meeting of the Irish Mathematical Society (BMC2004)**, Queen’s University Belfast, Belfast, Northern Ireland.

Plenary Speakers: A. Kechris (Pasadena), S. Patterson (Göttingen), G. Pisier (Paris), C. Procesi (Rome), G. Ziegler (Berlin), E. Zelmanov (San Diego).

Organizing Committee: M. Mathieu (Chair), D. Armitage (Secretary), L. Halbeisen (Treasurer).

Special Sessions: Noncommutative Functional Analysis, Combinatorics.

Support: We gratefully acknowledge the financial support BMC2004 receives from the London Mathematical Society and the Irish Mathematical Society.

Information: <http://www.qub.ac.uk/bmc2004>.

May 2004

* 3–5 **SIAM Conference on Imaging Science (IS04)**, Marriott City Center, Salt Lake City, Utah.

Conference Themes: Image acquisition; image reconstruction and restoration; image storage; compression; and retrieval; image coding and transmission; PDEs in image filtering and processing; image registration and warping; image modeling and analysis; statistical aspects of imaging; wavelets and multiscale analysis; multidimensional imaging sciences; inverse problems in imaging sciences; mathematics of visualization; biomedical imaging; applications.

Sponsor: SIAM Activity Group on Imaging Science (SIAG/IS).

Program Committee Cochairs: C. Johnson, Univ. of Utah; R. Whitaker, Univ. of Utah.

Program Committee (partial list): S. Acton, Univ. of Virginia; A. Aldroubi, Vanderbilt Univ.; F. L. Bookstein, Univ. of Michigan, Ann Arbor; E. J. Candes, Calif. Inst. of Tech.; E. R. Dougherty, Texas A&M Univ.; L. Florack, Tech. Univ. Eindhoven, Netherlands; S. Haker, Harvard Univ.; S. Osher, Univ. of Calif., Los Angeles; F. Santosa, Univ. of Minnesota; G. Sapiro, Univ. of Minnesota; A. Tannenbaum, Georgia Inst. of Tech.; M. Unser, École Polytech. Fédérale de Lausanne, Switzerland; J. Weickert, Saarland Univ. Germany; A. Yezzi, Georgia Inst. of Tech.

Invited Plenary Speakers (partial list): P. Basser, National Institutes of Health; G. Seroussi, Hewlett Packard; A. Toga, Univ. of California, Los Angeles; D. Wandell, Stanford Univ.

Deadlines: Minisymposium proposals: October 2, 2003. Minisymposium abstracts: October 30, 2003. Contributed abstracts in lecture or poster format: October 30, 2003.

Information: <http://www.siam.org/meetings/is04/part.htm>.

* 11–15 **IMA Hot Topics Workshop: Compatible Spatial Discretizations for Partial Differential Equations**, Institute for Mathematics & its Applications (IMA), University of Minnesota, Minneapolis, Minnesota.

Organizers: D. N. Arnold (IMA), P. Bochev (Sandia National Laboratories), R. Lehoucq (Sandia National Laboratories), R. Nicolaides (Carnegie-Mellon Univ.), M. Shashkov (Los Alamos National Laboratory).

Contact: Inst. for Math. and its Appl., Univ. of Minnesota, 207 Church St., SE., 400 Lind Hall, Minneapolis, MN 55455; phone: 612-624-6066; email: visit@ima.umn.edu.

Information: <http://www.ima.umn.edu/complex/spring/discretization.html>.

June 2004

* 13–16 **SIAM Conference on Discrete Mathematics (DM04)**, Loews Vanderbilt Plaza Hotel, Nashville, Tennessee.

Description: Discrete mathematics is a branch of the mathematical sciences with a wide range of challenging research problems and important applications in industry. Discrete mathematics has applications to all fields of computer science and to the physical and biological sciences. It is used extensively in telecommunications, and information processing and manufacturing, and many businesses and industries use techniques of discrete optimization to improve the efficiency of their operations.

Discrete mathematics is a dynamic field in both theory and applications. Researchers in discrete mathematics have established important connections with mainstream areas of pure and applied mathematics, and as a consequence research techniques and problems are drawn from a wide range of different fields, including algebra, topology, geometry, probability, analysis, and logic.

The purpose of this conference is to highlight the major theoretical advances in the field, the development of new tools for discrete mathematics, and the most significant of the new applications of discrete mathematics to problems arising in industry and business. The conference also seeks to bring together participants from the many different environments where discrete mathematics is developed and applied.

Information: email: meetings@siam.org.

* 13–18 **Algorithmic Number Theory Symposium VI (ANTS-VI)**, United States Naval Academy, Annapolis, Maryland.

Information: For information about ANTS VI see the conference website at <http://www.ew.usna.edu/~ants/>.

* 21–25 **Conference on Surface Water Waves**, The Fields Institute, Toronto, Ontario, Canada.

Organizing Committee: J. Carter (Colorado), W. Craig (McMaster), B. Deconinck (Colorado), J. Hammack (Pennsylvania), D. Henderson (Pennsylvania), D. Nicholls (Minnesota), H. Segur (Colorado), C. Sulem (Toronto).

July 2004

* 4–11 **The 10th International Congress on Mathematical Education**, Copenhagen, Denmark.

Description: The aim of the ICME congresses is to: (1) Show what is happening in mathematics education worldwide in terms of research as well as teaching practices. (2) Exchange information on the problems of mathematics education around the world. (3) Learn and benefit from recent advances in mathematics as a discipline. ICME-10 hopes to attract 3,000–4,000 researchers in mathematics education; mathematics educators, including teachers; and others working within the educational system from about 100 countries.

Application and Information: For an application to attend ICME-10, please visit our website at <http://www.icme-10.dk>. Applications for a travel grant are also available on the NCTM website, http://www.nctm.org/icme10/icme10_application.doc.

* 19–23 **XVIII Escola de Algebra (Eighteenth Algebra School)**, State University of Campinas (UNICAMP), Campinas, SP/Brazil.

Program: Minicourses at different levels of 5 one-hour lectures each, invited conference cycles of 3 one-hour lectures each, invited conference talks of one-hour each, research communications of half an hour each, poster sections.

Conference Topics: Commutative and Noncommutative Algebra, Ring and Group Theory, Algebraic Geometry, Number Theory and Representation Theory.

Scientific Committee: A. Hefez (UFF), A. Paques (UNIAMP), A. Simis (UFPE), G. Leal (UFRJ), M. Ferrero (UFRGS), I. Shestakov (USP), and S. Sidki (UnB).

Organizing Committee: A. J. Engler (UNICAMP), D. Kochloukova (UNICAMP), F. U. Coelho (USP), N. Rocco (UnB), P. Koshlukov (UNICAMP), and P. Brumatti (UNICAMP).

Deadlines: March 31, 2004 (for communications and posters).

Information: <http://www.ime.unicamp.br/~escola>; email: escola@ime.unicamp.br.

September 2004

* 19–22 **The First International Conference on Complex Systems CSIMTA 2004 (Complex Systems Intelligence and Modern Technology Applications)**, Cherbourg, France.

Aim: The aim of this conference is to create an interdisciplinary forum for all scientists concerning complexity.

Information: <http://www.chbg.unicaen.fr/lusac/csimta>.