Mathematics Calendar

Please submit conference information for the Mathematics Calendar through the Mathematics Calendar submission form at `http://www.ams.org/cgi-bin/mathcal-submit.pl`. The most comprehensive and up-to-date Mathematics Calendar information is available on the AMS website at `http://www.ams.org/mathcal/`.

August 2008

* 6–10 **BLAST**, University of Denver, Denver, Colorado.
Description: BLAST is a new conference focusing on Boolean Algebras, Lattices, Algebraic Logic, Universal Algebra, Set Theory, Set-theoretic Topology and Point-free Topology.
Plenary Speakers: Bernhard Banaschewski (McMaster University); James Cummings (Carnegie Mellon University); Mai Gehrke (Radboud Universiteit Nijmegen); Martin Goldstern (Technische Universität Wien); Tetsuya Ishiu (Miami University); Ales Pultr (Charles University); Judy Roitman (University of Kansas); Kazushige Terui (National Institute of Informatics, Japan); Constantine Tsinakis (Vanderbilt University).
Tutorials: Algebra of Logic: James Raftery (University of Kwazulu-Natal); Set Theory: Katie Thomson (Universität Wien); Set-theoretic Topology: Peter Nyikos (University of South Carolina); Universal Algebra: Matt Valeriote (McMaster University); Mini Course: Forbidden Configurations in Lattices: Richard Ball and Ales Pultr; Local Organizing and Program Committee: Richard Ball, Natasha Dobrinen (Co-chair), Nikolaos Galatos (Co-chair).
Information: email: `ngalatos@du.edu`; `http://www.math.du.edu/blast`.

* 25–27 **Groups and Infinite Graphs**, Erwin Schrödinger International Institute, Vienna, Austria.
Scientific committee: Bernhard Krön (local organizer, University of Vienna, Austria); Bojan Mohar (Simon Fraser University, BC, Canada); Wolfgang Woess (Graz University of Technology, Austria).
Topics: Geometric group theory, group actions on graphs, infinite graph theory.
Talks: If you want to contribute a talk, please send title and abstract to `bernhard.kroen@univie.ac.at` by friday May 30, 2008. We will only have a restricted number of talks, because there should be time for discussions and work in smaller groups. Every participant will have the opportunity to present a poster.
Support: There is no conference fee, but the possibilities of financial support are very limited.
Information: email: `bernhard.kroen@univie.ac.at`; `http://homepage.univie.ac.at/bernhard.kroen/groups_graphs/index.html`.

* 27–29 **1st Workshop in Stochastic Modeling**, Universidade de Sao Paulo Ribeirão Preto, Sao Paulo, Brazil.
Description: The workshop is intended as 1) a forum to discuss new developments in stochastic modeling and its applications, 2) an occasion to detect new directions of research in probability and stochastic processes, 3) an opportunity to establish new collaborations, 4 an opportunity for the students to begin their scientific life.
Information: `http://dfm.ffclrp.usp.br/mat/wsm1`; email: `fm-achado@ime.usp.br`.

* 28–30 **The 4th William Rowan Hamilton Geometry and Topology Workshop Heegaard splittings, mapping class groups, curve complexes and related topics**, Hamilton Mathematics Institute (HMI), Trinity College, Dublin, Ireland.
Description: This is an announcement for the 4th William Rowan Hamilton Geometry and Topology Workshop to be held at the Hamilton Mathematics Institute (HMI), in Trinity College, Dublin, Ireland. This year, the workshop runs from Thursday, August 28th, through Saturday, August 30th.

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 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. 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/July, 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/`.

Topic: This year's topic is Heegaard splittings, mapping class groups, curve complexes and related topics.
Funding and Sponsors: The workshop is co-sponsored by Boston College, and the HMI. A limited amount of funding is available for both junior and senior researchers wishing to attend.
Information: http://www.hamilton.tcd.ie/events/gt/gt2008.htm; email: bridgem@bc.edu.

* 29–September 2 **The International Conference of Differential Geometry and Dynamical Systems (DGDS-2008) & the V-th International Colloquium of Mathematics in Engineering and Numerical Physics (MENP-5, mathematics sections)**, Mangalia, Romania.
Description: The Conference main topics are: 1. Applications of Riemannian and Finsler-Lagrange-Hamilton structures; 2. Dynamical systems and jet space theory; 3. Multitime evolutions and optimal control problems; 4. Magnetic dynamical systems; antennas theory; 5. Mathematical models in Physics and in Engineering; 6. Mathematical statistics; 7. Chaos and fractals. Graduate students and postdocs interested in these rapidly developing fields are warmly welcome.
Information: email: vbalan@mathem.pub.ro; http://www.mathem.pub.ro.

* 30–31 **2008 Annual Convention—Mathematics Teachers Association of the Philippines—Tertiary Level Chapter**, Iloilo City, Philippines.
Description: The Convention with the Theme "Advancing Mathematics through Country's Development" hopes to bring together mathematics educators and researchers, and teachers in the country to discuss the current issues and trends in the teaching and assessment of mathematics learning. This convention is fully endorsed by the Commission on Higher Education.
Information: email: adiansuy@gmail.com.

September 2008

* 8–9 **Drexel University Workshop on Topology and Physics**, Departments of Mathematics and Physics, Drexel University, Philadelphia, Pennsylvania.
Description: The purpose of the workshop is to bring together mathematicians, physicists, and students interested in the interaction between topology and physics. Six invited lectures will describe various classical and current aspects of this interaction at a level appropriate to an audience of non-specialists. Poster sessions and extended discussion periods will provide the opportunity for participants to exchange ideas and establish contacts and collaborations.
Invited speakers include: Tony Pantev (University of Pennsylvania), Amir Hajian (Princeton University), Wilma Olson and Irwin Tobias (Rutgers University), Robert Gilmore (Drexel University), Eric Sharpe (Virginia Tech), and Randall D. Kamien (University of Pennsylvania).
Information: http://www.pages.drexel.edu/~gln22/Workshop.htm; email: gln22@drexel.edu.

* 8–10 **GLAM, Global Analysis on Manifolds**, University of Rome "La Sapienza", Rome, Italy.
Description: On the occasion of the 60th birthday of Sylvestre Gallot.
Scientific Committee: V. Ancona (Italy, Univ. Firenze), W. Ballmann (Germany, Univ. Bonn), P. Berard (France, Institut Fourier), J. P. Bourguignon (France, CNRS-IHES - Bures-sur-Yvette), J. Cheeger (U.S.A., N.Y.U.), H. Karcher (Germany, Univ. Bonn), S. Marchiafava (Italy, Univ. Roma La Sapienza), S. Salamon (Italy, Politecnico Torino).
Organizing Committee: G. Besson (France, Institut Fourier), M. Bordoni (Italy, Univ. Roma La Sapienza), G. D'ÒAmbra (Italy, Univ. Cagliari), A. El Soufi (France, Univ. Tours), B. Franchi (Italy, Univ. Bologna), R. Grimaldi (Italy, Univ. Palermo), O. Hijazi (France, Univ. Nancy), A. Sambusetti (Italy, Univ. Roma La Sapienza), A. Savo (Italy, Univ. Roma La Sapienza).
Information: http://www.dmmm.uniroma1.it/glam; email: leon@dmmm.uniroma1.it.

* 17–19 **First Summer School on Copulas**, Johannes Kepler University, Linz, Austria.
Description: The Summer School aims at providing a meeting point for exchanging ideas and presenting new directions on the theory of copulas and related applications.
Information: http://www.flll.jku.at/ssc; email: fabrizio.durante@jku.at.

* 26–28 **Fourth Yamabe Symposium: "Geometry and Analysis"**, School of Mathematics, University of Minnesota, Minneapolis, Minnesota.
Confirmed speakers are: Simon Brendle, Stanford University; Alice Chang, Princeton University; Gerhard Huisken, Albert Einstein Institute, Potsdam; Ngaiming Mok, Hong Kong University; Leon Simon, Stanford University; Yum-Tong Siu, Harvard University; Neil Trudinger, Australian National University; and Burkhard Wilking, University of Muenster.
Support: From the National Science Foundation will be used to defray workshop expenses for a number of participants, with highest preference given to younger scientists (grad students, postdocs, young faculty or researchers at most five years after Ph.D.), although all active people are eligible. Women and minorities are especially encouraged to apply.
Deadline: The application deadline for full consideration for funding is Thursday, August 7, 2008.
Information: http://www.math.umn.edu/yamabe/; email: gulliver@math.umn.edu.

* 27 **Illinois/Missouri Applied Harmonic Analysis Seminar**, Southern Illinois University, Edwardsville, Illinois.
Description: The Seminar is an ongoing sequence of meetings fostering research interactions among mathematicians, engineers, and physicists who develop and apply techniques from harmonic analysis.
Theoretical topics of interest include: Wavelets, Gabor systems (time-frequency analysis), frames and Riesz bases, approximation theory, X-ray type transforms.
Applications of interest include: All kinds of signal and image analysis, processing and reconstruction, both analogue and digital.
Support: This conference is supported in part by the National Science Foundation and the Institute for Mathematics and its Applications (IMA) through its Participating Institution (PI) Program. PI members may use IMA/PI funds to support travel of their personnel to this conference.
Registration: Conference registration is free, and all interested researchers are invited to attend.
Information: For more information, please visit the conference website or contact the local organizer: Myung-Sin Song; msong@siue.edu; http://www.siue.edu/~msong/IMAHA/IMAHA4.html.

October 2008

* 6–10 **Partial differential equations and differential Galois theory: A conference on the occasion of the 80th birthday of Bernard Malgrange**, Centre International de Rencontres Mathématiques (CIRM), Marseille, France.
Description: The purpose of this meeting is to exchange ideas on algebraic structures of Pde's going back to Elie Cartan, Lie and Galois while celebrating the birthday of one of the most active mathematicians in this field. Main topics will be differential Galois theory, groupoids, Cartan's involutivity, non linear algebraic partial differential equations. The scientific committee is composed of L. Boutet de Monvel, J.P. Ramis, C. Sabbah and the two organizers Y. Laurent and L. Stolovitch.
Information: http://www.cirm.univ-mrs.fr/liste_rencontre/Rencontres2008/Renc319/Renc319.html; email: stolo@picard.ups-tlse.fr.

* 13–17 **Applications of Internet MRA to Cyber-Security**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Overview: Internet-security is a large and complex problem space with profound implications for our society. On one side are defenders who are responsible for creating systems, protocols, policies, and other mechanisms to protect an IT infrastructure from unwanted access. On the other side are attackers who conduct malicious activity in the Internet for recognition, profit, or more sinister reasons. This workshop will assemble a group of leading researchers and cyber-security professionals to discuss several key challenges for defenders.
Organizing Committee: Bill Aiello, Paul Barford, Tal Malkin, Niels Provos, Mike Reiter, Matthew Roughan.
Application/Registration: An application/registration form is available at http://www.ipam.ucla.edu/programs/mraws2/. Applications received by September 1, 2008 will receive fullest consideration. Encouraging the careers of women and minority mathematicians

and scientists is an important component of IPAM's mission and we welcome their applications.

* 20–22 **10th International Conference on Information and Communications Security (ICICS'08)**, Birmingham, United Kingdom.
Description: The event, which started in 1997, brings together individuals involved in multiple disciplines of Information and Communications Security, in order to foster the exchange of ideas.
Organizers: ICICS 2008 will be organized by the School of Computer Science, University of Birmingham, in co-operation with HP Laboratories (Bristol, UK), the UK Engineering and Physical Sciences Research Council (EPSRC), and the International Communications and Information Security Association (ICISA).
Information: email: a.j.brown@cs.bham.ac.uk; http://events.cs.bham.ac.uk/icics08/.

* 22–23 **DIMACS Workshop on Nanotechnology and Biology**, DIMACS Center, CoRE Building, Rutgers University, Piscataway, New Jersey.
Short Description: Recent years have witnessed the development of fabrication and characterization technologies to manipulate and analyze matter at the nanoscale. These technologies have applications in myriad areas, including in biology, where nature has evolved its own nanotechnologies that inspire many contemporary engineered nanodevices. As first generation nanotechnologies have provided proofs of principle for many exciting applications, the need for better understanding of biology and physics at the nanoscale through modeling and computation has become apparent. This workshop will explore the foundations of nanoscale assembly in natural and engineered systems. Natural systems may include viruses, organelles, or multi-molecular machines as they self-assemble and take shape in processes that might include, for example, development, adaptation, or cancer. Engineered systems under development include smart drug delivery systems, DNA-based fabrication, layer-by-layer assembly and electrospun nanofibers. The ability to model and understand the natural systems will accelerate the development of engineered nanosystems. While efforts to attain better understanding through modeling and computation are of primary interest, the integration of modeling and experiments is quite relevant and necessary to advance our understanding of self-assembly at the nanoscale. Because this field is so interdisciplinary, we envision an audience that includes biologists, chemists, physicists, computer scientists and engineers.
Organizers: Stan Dunn, Rutgers University; email: smd@occlusal.rutgers.edu; Yannis Androulakis, Rutgers University, email: yannis@rci.rutgers.edu; Charlie Roth, Rutgers University, email: cmroth@rci.rutgers.edu.
Local Arrangements: Workshop Coordinator, DIMACS Center, email: workshop@dimacs.rutgers.edu; 732-445-5928; http://dimacs.rutgers.edu/Workshops/Nanotechnology/index.html.

* 22–24 **Twenty-Second Midwest Conference on Combinatorics, Cryptography, and Computing (MCCCC)**, University of Nevada, Las Vegas (UNLV), Las Vegas, Nevada.
Description: The title of the conference is fairly descriptive of the subjects discussed.
Invited speakers: Gary Chartrand, Western Michigan University; Ronald Graham, University of California, San Diego; Spyros Magliveras, Florida Atlantic University; Doug Stinson, University of Waterloo, Canada; and Catherine Yan, Texas A&M University.
Talks: Twenty-minute contributed talks are invited.
Information: http://www.mcccc.info; email: ebrahim.salehi@unlv.edu.

* 27–29 **DIMACS Workshop on Models/Methodological Problems of Botanical Epidemiology**, DIMACS Center, CoRE Building, Rutgers University, Piscataway, New Jersey.
Description: Presented under the auspices of the Special Focus on Computational and Mathematical Epidemiology. This workshop will gather experts from the botanical epidemiology and genetics communities together with mathematicians interested in modeling using differential equations, discrete systems, and stochastic processes to investigate modeling and methodological problems of spread of disease in plants. The workshop will investigate modeling approaches including ode, pde, individual-based models including percolation, random graph, stochastic, spatially-explicit and spatially-implicit (moment closure and pairwise approximation) and metapopulation models. We will also discuss data and model testing issues, such as parameter estimation for spatially-explicit and spatially-implicit models with and without unobserved compartments; data collection for model testing and parameter estimation from lattice crops, row crops, continuum and mosaics; optimization of experimental design for parameter estimation and model discrimination; and analysis of microcosm data to distinguish demographic and environmental stochasticity.
Organizers: Chris Gilligan, Cambridge; cag1@cus.cam.ac.uk.
Local Arrangements: Workshop Coordinator, DIMACS Center, workshop@dimacs.rutgers.edu, 732-445-5928.
Information: http://dimacs.rutgers.edu/Workshops/Botanical/.

November 2008

* 3–7 **Beyond Internet MRA: Networks of Networks**, Institute for Pure and Applied Mathematics (IPAM), UCLA Los Angeles, California.
Overview: This workshop will bring together domain experts from the fields of engineering, biology, mathematics, and critical infrastructure protection to develop the foundation of a nascent theory in support of the networks of networks concept. In particular, we will use the Internet as a case study to illustrate how early verbal observations and arguments with deep engineering insight have led via an interplay with mathematics and measurements to increasingly formal statements and powerful theoretical developments.
Organizing Committee: Walter Willinger (chair), David Alderson, John Doyle, Ramesh Govindan, Craig Partridge.
Application/Registration: An application/registration form is available at http://www.ipam.ucla.edu/programs/mraws3/. Applications received by September 22, 2008, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

* 4–6 **Multi-Scale Phenomena In Biology**, OIST Seaside House, Okinawa, Japan.
Description: A multitude of biological phenomena are described at multiple levels. What are the commonalities and differences between neuroscience, evolutionary biology, molecular biology and ecology in this regard? How can mathematics help in describing these phenomena?
Confirmed Speakers: Bjorn Engquist; The University of Texas at Austin; Hans Othmer; University of Minnesota; Eric Vanden-Eijnden; Courant Institute; Keiko Takahashi, Earth Simulator Center; Dan Rockmore, Dartmouth College; Terry Sejnowski, Salk Institute; Diego Rasskin-Gutman, Konrad Lorenz Institute for Evolution and Cognition Research; Tony Bell, Redwood Center for Theoretical Neuroscience; Robert Warner, University of California; Walter R. Tschinkel, Florida State University; Klaus M. Stiefel, OIST.
Support: Travel scholarships are available. We encourage applications by graduate students and postdocs whose research interests touch these subjects. To apply please contact Ryoko Uchida or Shino Fibbs (multi@oist.jp).
Information: http://www.irp.oist.jp/tenu/multi.html.

* 7–9 **Applications of Geometry to Topology and Physics: A conference in honor of the 70th birthday of Herman Gluck**, Rutgers-Newark, Newark, New Jersey.
Description: This conference, in honor of the 70th birthday of Herman Gluck, will address two topics in the application of geometry to other fields: (1) calibrated geometry and its applications to physics; (2) the application of geometry to knot theory, including topics such as Freedman's Mobius energy and Nabutovsky's ropelength.
Speakers tentatively include: Thomas Banchoff, Jason Cantarella, Robert Connelly, Dennis DeTurck, David Gabai, Weiqing Gu, Blaine Lawson, David Singer, Dennis Sullivan, and Gang Tian.
Support: Some financial support is available.
Information: email: parslerj@wfu.edu; http://www.math.uga.edu/gluckfest.

* 11–14 **2nd International Conference of Young Mathematicians on Differential Equations and Applications dedicated to Ya. B. Lopatinskii**, Department of Differential Equations, Donetsk National University, Universitetskaya, 24, Donetsk, 83055, Ukraine.

Topics: General theory of boundary value problems for PDEs, Lopatinskii condition. Investigations of boundary value problems for classes of PDEs. Nonlinear PDEs, free boundary problems. Qualitative theory of PDEs. Differential and integral operators, operator methods, difference equations. Algebraic, geometrical and topological methods in the theory of ODEs and PDEs. Ordinary DEs, dynamical systems, optimal control. Mathematical physics and other applications of DEs in natural-science, technical and social studies.
Aim: Bringing together young and some venerable researchers in above areas in order to get acquainted, to communicate, and to understand what directions are actual and perspective. The word "young" in the title means a general direction of the conference but doesn't mean any age limitations for the participants.
Information: `http://www.donnu.edu.ua/en/index.asp` (then click button from conferenceannouncementinleft-side column); email: `icde2008@matfak.dongu.donetsk.ua`; tel: +38(062)3054628 +38(062)3029260; fax: +38(062)3054628.

* 17–21 **New Mathematical Frontiers in Network Multi-Resolution Analysis**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Description: This workshop will bring together researchers in mathematics, computer science, electrical engineering, and statistics to develop new mathematical foundations in network-centric multiresolution analysis and to explore and define new mathematical or algorithmic techniques in network MRA. These techniques include methods of analysis, representation, and synthesis of large networks, as well as visualization, analysis, and representation of network measurements.
Organizing Committee: Robert Calderbank, Anna Gilbert, Peter Jones, Steven Low, Matthew Roughan, Denis Zorin.
Application/Registration: An application/registration form is available at `http://www.ipam.ucla.edu/programs/mraws4/`. Applications received by October 6, 2008, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

December 2008

* 5–8 **International Conference on Partial Differential Equations and Applications in honour of Professor Philippe G. Ciarlet's 70th birthday**, City University of Hong Kong, Kowloon, Hong Kong.
Description: The objectives of the Conference are to review and discuss some of the latest trends in the field of partial differential equations and applications. The conference is dedicated to Professor Philippe G. Ciarlet, professor emeritus, Université Pierre et Marie Curie, and chair professor, City University of Hong Kong, on the occasion of his 70th birthday, in recognition of his mathematical achievements and of his dedication to the mathematical community.
Information: `http://www6.cityu.edu.hk/rcms/ICPDEA2008/`; email: `mclbj@cityu.edu.hk`.

* 19–21 **Centenary Celebration of Calcutta Mathematical Society: International Symposium on Recent Advances in Mathematics and its Applications: (ISRAMA 2008)**, Calcutta Mathematical Society at AE-374, Sector-1, Salt Lake City Kolkata (Calcutta) 700064, India.
Description: The Calcutta Mathematical Society is organizing an International Symposium on Recent Advances in Mathematics and its Applications (ISRAMA 2008) on occasion of its Centenary.
Topics: Algebra, discrete mathematics & theoretical computer science analysis & topology and their applications; geometry and its applications; dynamical systems; chaos and fractals continuum mechanics; plasma physics; control theory and optimization; theory bio-mechanics and bioinformatics; applications of mathematics to environmental problems; history and philosophy of physical science; quantum information; theory relativity and its applications.
Deadline: Last Date: August 31, 2008, for receipt of full paper along with an abstract and registration.
Information: email: `cms.centenary@gmail.com`; `http://www.calmath.org/forthcoming.html`.

* 22–23 **Mathematical Sciences for Advancement of Science and Technology (MSAST 2008)**, Institute for Mathematics, Bioinformatics, Information Technology and Computer Science (IMBIC), Salt Lake City, Kolkata (Calcutta), India.
Call for Papers: Authors are requested to submit the full paper related to the theme of the Conference: "Mathematical Sciences for Advancement of Science and Technology" with an abstract indicating the motivation of the problem, its method of solution and important results to the Secretary of IMBIC. All the papers are to be screened for presentation in the Conference. All deliberations of the Symposium shall take place in English. All correspondences in respect of the Conference are to be addressed to Dr Avishek Adhikari, Secretary, IMBIC, AE 317, Salt Lake City, Sector II, Kolkata 700091, West Bengal, India; email: `E-mail avishek.adh@gmail.com`.
Information: `http://www.imbic.org/forthcoming.html`.

January 2009

* 4–6 **ACM-SIAM Symposium on Discrete Algorithms (SODA09)**, New York Marriott Downtown, New York, New York.
Description: This symposium focuses on research topics related to efficient algorithms and data structures for discrete problems. In addition to the design of such methods and structures, the scope also includes their use, performance analysis, and the mathematical problems related to their development or limitations. Performance analyses may be analytical or experimental and may address worst-case or expected-case performance. Studies can be theoretical or based on data sets that have arisen in practice and may address methodological issues involved in performance analysis.
Information: `http://www.siam.org/meetings/da09/`; email: `wilden@siam.org`.

* 5–8 **Joint Mathematics Meetings**, Washington, District of Columbia.
Information: `http://www.ams.org/amsmtgs/national.html`.

* 12–16 **Quantitative and Computational Aspects of Metric Geometry**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Overview: We have witnessed a recent revival of interest in the rich structure and profound properties of metric spaces. Much contemporary research on metric geometry is motivated by the discovery of unexpected connections linking fundamental questions in geometry and analysis with combinatorial optimization, computational complexity, and statistics. This has led to the emergence of an impressive and growing repertoire of common problems and techniques.
Organizing Committee: Subhash Khot, Bruce Kleiner, Manor Mendel, Assaf Naor, Yuval Rabani.
Application/Registration: An application/registration form is available at `http://www.ipam.ucla.edu/programs/mg2009/`. Applications received by December 1, 2008, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.
Information: email: `sbeggs@ipam.ucla.edu`; `http://www.ipam.ucla.edu/programs/mg2009/`.

* 12–June 26 **Algebraic Lie Theory**, Isaac Newton Institute for Mathematical Sciences, 20 Clarkson Road, Cambridge CB3 OEH, United Kingdom.
Description: Lie theory has profound connections to many areas of pure and applied mathematics and mathematical physics. In the 1950s, the original "analytic" theory was extended so that it also makes sense over arbitrary algebraically closed fields, in particular, fields of positive characteristic. Understanding fundamental objects such as Lie algebras, quantum groups, reductive groups over finite or p-adic fields and Hecke algebras of various kinds, as well as their representation theory, are the central themes of "Algebraic Lie Theory". It is anticipated that the activities of the programme will lead to a focalisation and popularisation of the various recent methods, advances and applications of Algebraic Lie Theory.
Organizers: Professor M. Geck (Aberdeen), Professor A. Kleshchev (Oregon) and Professor G. Röhrle (Ruhr-Universität Bochum).
Information: email: `s.penton@newton.cam.ac.uk`; `http://www.newton.ac.uk/programmes/ALT/index.html`.

* 14–16 **International Conference on Modeling of Engineering and Technological Problems and 9th National Conference of Indian Society of Industrial & Applied Mathematics**, BMAS Engineering College, Sharda Group, Agra, India.

Information: Details can be found at the website: http://www.bmas.edu.in and http://www.siam-india.org. Those who are interested in participating in this conference may visit the websites and contact: Prof. Abul Hasan Siddiqi, Convener, Scientific Committee, through email: Siddiqi.abulhasan@gmail.com or mobile # 00 91 9837069944.

* 19–July 3 **Discrete Integrable Systems**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.
Description: The programme will focus on a number of aspects which are likely to become of major importance for subsequent developments, such as: the connection between integrable dynamical maps and the algebraic geometry of rational surfaces, the issue of irreducibility of nonlinear special functions defined through discrete equations and the underlying Galois theory of difference equations, the underlying spectral theory and isomonodromic deformations of linear difference equations, the connection with modern developments in representation theory such as cluster algebras and affine Weyl groups, the emergence of Diophantine problems of number theory and p-adic analysis in connection with the integrability of analytic difference equations, the problem of finding symmetries and conservation laws for discrete systems, and the primary role discrete integrable systems play in quantum mechanics, in particular quantum groups and quantum field theory on the space-time lattice.
Information: email: info@newton.ac.uk; http://www.newton.ac.uk/programmes/DIS/.

* 22–30 **Numerical Approaches to Quantum Many-Body Systems**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Overview: The aim of this workshop is to bring together an interdisciplinary group of researchers from mathematics, physics, quantum information, computer science, and other fields to discuss advances in the computational description of quantum many-body systems. On January 22–24, we will offer a short course for young researchers with lectures and hands-on tutorials on state-of-the-art numerical techniques. The second week will feature lectures and discussions by experts in the field.
Organizing Committee: Ulrich Schollwöck, Simon Trebst, Guifre Vidal.
Application/Registration: An application/registration form is available at http://www.ipam.ucla.edu/programs/qs2009/. Applications received by December 11, 2008, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register for the second week and attend without IPAM funding.
Information: email: sbeggs@ipam.ucla.edu; http://www.ipam.ucla.edu/programs/qs2009/.

February 2009

* 9–13 **Laplacian Eigenvalues and Eigenfunctions: Theory, Computation, Application**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Overview: The investigation of eigenvalues and eigenfunctions of the Laplace operator in a bounded domain or a manifold is a subject with a history of more than two hundred years, and is still a central and active area in mathematics, physics, engineering, and computer science. This workshop will be an exciting opportunity to discuss various aspects of new or long-standing problems in the field with experts in different fields, including mathematics, physics, biology, and computer sciences.
Organizing Committee: Denis Grebenkov, Peter Jones, Naoki Saito.
Application/Registration: An application/registration form is available at http://www.ipam.ucla.edu/programs/le2009/. Applications received by December 15, 2008, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.
Information: email: sbeggs@ipam.ucla.edu; http://www.ipam.ucla.edu/programs/le2009/.

* 23–27 **Modern Moduli Theory**, Mathematical Sciences Research Institute, Berkeley, California.
Organizers: I. Coskun, S. Katz, A. Marian, R. Pandharipande, R. Thomas, H. H. Tseng, R. Vakil.
Description: This workshop will convene experts specializing on the minimal model program, derived categories and moduli spaces in an informal environment to facilitate the cross-fertilization of ideas across these different fields of algebraic geometry.
Information: http://www.msri.org/calendar/workshops/WorkshopInfo/472/show_workshop.

* 23–27 **Rare Events in High-Dimensional Systems**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Overview: It is a significant theoretical and computational challenge to quantify the rates and mechanisms of rare events. While there is a growing consensus on the open questions, it is still not clear how well current theoretical and computational techniques address them. The aim of the workshop is to address these issues through discussions with and presentations by mathematicians, chemists, physicists, and engineers.
Organizing Committee: Giovanni Ciccotti, Kristen Fichthorn, Ioannis Kevrekidis, Christof Schuette, Eric Vanden-Eijnden, Arthur Voter.
Application/Registration: An application/registration form is available at http://www.ipam.ucla.edu/programs/re2009/. Applications received by January 12, 2009 will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.
Information: http://www.ipam.ucla.edu/programs/re2009/; email: sbeggs@ipam.ucla.edu.

March 2009

* 18–20 **IAENG International Conference on Scientific Computing ICSC 2009**, Regal Kowloon Hotel, Kowloon, Hong Kong.
Description: The conference ICSC'09 is held under the International MultiConference of Engineers and Computer Scientists 2009. The IMECS 2009 is organized by the International Association of Engineers (IAENG), and serves as good platforms for the engineering community members to meet with each other and to exchange ideas. The last IMECS 2008 has attracted more than one thousand participants from over 50 countries. All submitted papers will be under peer review and accepted papers will be published in the conference proceeding (ISBN: 978-988-17012-2-0). The abstracts will be indexed and available at major academic databases. The accepted papers will also be considered for publication in the special issues of the journal Engineering Letters, in IAENG journals and in edited books.
Important Dates: Draft Manuscript submission deadline: December 8, 2008. Camera-Ready Papers Due & Registration Deadline: January 10, 2009. ICCA 2009: March 18–20, 2009.
Information: http://www.iaeng.org/IMECS2009/ICSC2009.html; email: imecs@iaeng.org.

* 23–27 **Combinatorial, Enumerative and Toric Geometry**, Mathematical Sciences Research Institute, Berkeley, California.
Organizers: Michel Brion, Anders Buch, Linda Chen, William Fulton, Sándor Kovács, Frank Sottile, Harry Tamvakis, and Burt Totaro.
Description: This workshop will present the state of the art in combinatorial, enumerative, and toric algebraic geometry. It will highlight this part of modern algebraic geometry within the context of the broader semester-long parent program at MSRI, and convey its scope to young researchers.
Information: http://www.msri.org/calendar/workshops/WorkshopInfo/473/show_workshop.

* 27–29 **AMS Central Section Meeting**, University of Illinois at Urbana-Champaign, Urbana, Illinois.
Information: http://www.ams.org/amsmtgs/sectional.html.

April 2009

* 4–5 **AMS Southeastern Section Meeting**, North Carolina State University, Raleigh, North Carolina.
Information: http://www.ams.org/amsmtgs/sectional.html.

* 25–26 **AMS Eastern Section Meeting**, Worcester Polytechnic Institute, Worcester, Massachusetts.

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

* 25–26 **AMS Western Section Meeting**, San Francisco State University, San Francisco, California.
Information: http://www.ams.org/amsmtgs/sectional.html.

June 2009

* 14–20 **Stochastic Analysis and Random Dynamical Systems**, Ivan Franko National University of Lviv, Ukraine.
Description: The Conference is devoted to the modern aspects of the theory of random dynamical systems. The Conference is aimed to bring together knowledge from different fields of probability theory and stochastic processes related to this subject. The Conference will take place in Lviv, one of the oldest and most beautiful cities of Ukraine. It will be held in the building of Ivan Franko National University of Lviv. During the Conference Social and Cultural Program will be organized.
Information: http://www.imath.kiev.ua/~sard/; email: sard@imath.kiev.ua.

July 2009

* 20–24 **Equadiff 12**, Brno, Czech Republic.
Description: Under the name "Equadiff" a series of important international conferences on differential equations have been organized in Europe during the last decades. The first one took place in Prag (1962) and the second one in Bratislava (1966). From 1970 on the location alternated between Czech Republic/Slovakia and various countries of Western Europe. The most recent Equadiff conferences took place in Vienna (2007), Bratislava (2005), Hasselt (2003), Prag (2001), and Berlin (1999).
Information: email: dosly@math.muni.cz; http://www.math.muni.cz/~equadiff/.

* 20–December 18 **Non-Abelian Fundamental Groups in Arithmetic Geometry**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.
Description: In the 1980's Grothendieck formulated his anabelian conjectures that brought to an hitherto-unexplored depth the interaction between topology and arithmetic. This suggested that the study of non-abelian fundamental groups could lead to a new understanding of deep arithmetic phenomena, including the arithmetic theory of moduli and Diophantine finiteness on hyperbolic curves. A certain amount of work in recent years linking fundamental groups to Diophantine geometry intimates deep and mysterious connections to the theory of motives and Iwasawa theory, with their links with arithmetic problems on special values of L-functions such as the conjecture of Birch and Swinnerton-Dyer. The goal of this programme is to investigate the ideas and problems of anabelian geometry within the global context of mainstream arithmetic geometry.
Organisers: M. Kim (UCL), J. Coates (Cambridge), F. Pop (Pennsylvania), M. Saidi (Exeter), P. Schneider (Münster).
Information: email: info@newton.ac.uk; http://www.newton.ac.uk/programmes/NAG/.

* 29–July 24 **The Cardiac Physiome Project**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.
Description: Predicting physiological behaviour from experimental data combined with environmental influences is a compelling, but unfulfilled, goal of post-genomic biology. This undeniably ambitious goal is the aim of the Physiome Project and its subset the Cardiome Project which is an international effort to build a biophysically based multi-scale mathematical model of the heart. To achieve this goal requires further development of the current generation of advanced cardiac models which span an already diverse set of mathematical representations from stochastic sub-cellular regulation models to whole organ based sets of coupled partial differential equations. The focus of this programme will be on the development and application of the mathematical techniques which underpin the ongoing extension of this approach.
Organizers: R. H. Clayton (Sheffield); P. Hunter (Auckland); N. Smith (Oxford); S. Waters (OCIAM).
Information: email: info@newton.ac.uk; http://www.newton.ac.uk/programmes/CPP/.

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

August 2009

* 12–December 18 **Dynamics of Discs and Planets**, Isaac Newton Institute for Mathematical Sciences, Cambridge, England.
Description: This programme will bring together world-leading researchers in disciplines including accretion disc theory, planet formation, planet-disc interaction and solar system dynamics. With such a group we seek to provide a firm theoretical basis for our understanding of extrasolar planetary systems and their formation in protoplanetary discs. The programme encompasses three themes: (1) dynamics of astrophysical discs and the numerical and analytical methods used to study them (i.e., the study of gaseous accretion discs); (2) dynamics specific to discs in which planets are forming including that formation process (i.e. the study of how solid material interacts with gaseous discs); (3) dynamics that is relevant once planets have formed (i.e. the study of solid body interactions).
Organizers: A Morbidelli (Observatoire de Nice); R. P. Nelson (Queen Mary, London); Gl. Ogilvie (Cambridge); J. M. Stone (Princeton), M. C. Wyatt (Cambridge).
Information: email: info@newton.ac.uk; http://www.newton.ac.uk/programmes/DDP/.

* 17–21 **Modular forms on noncongruence groups**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will explore the arithmetic and analytic properties of noncongruence modular forms and their potential applications. A special focus will be on the connection between Scholl representations attached to noncongruence cuspforms and automorphic forms by applying modularity lifting theorems.
Information: http://aimath.org/ARCC/workshops/noncongruence.html; email: farmer@aimath.org.

October 2009

* 16–18 **AMS Central Section Meeting**, Baylor University, Waco, Texas.
Information: http://www.ams.org/amsmtgs/sectional.html.

* 24–25 **AMS Eastern Section Meeting**, Pennsylvania State University, University Park, Pennsylvania.
Information: http://www.ams.org/amsmtgs/sectional.html.

* 30–November 1 **AMS Southeastern Section Meeting**, Florida Atlantic University, Boca Raton, Florida.
Information: http://www.ams.org/amsmtgs/sectional.html.

November 2009

* 7–8 **AMS Western Section Meeting**, University of California, Riverside, California.
Information: http://www.ams.org/amsmtgs/sectional.html.