

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 2011

- * 1–12 **Summer Graduate Workshop: Cluster Algebras and Cluster Combinatorics**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Cluster algebras are a class of combinatorially defined rings that provide a unifying structure for phenomena in a variety of algebraic and geometric contexts. A partial list of related areas includes quiver representations, statistical physics, and Teichmüller theory. This summer workshop for graduate students will focus on the combinatorial aspects of cluster algebras, thereby providing a concrete introduction to this rapidly-growing field. Besides providing background on the fundamentals of cluster theory, the summer school will cover complementary topics such as total positivity, the polyhedral geometry of cluster complexes, cluster algebras from surfaces, and connections to statistical physics. No prior knowledge of cluster algebras will be assumed. The workshop will consist of four mini-courses with accompanying tutorials. Students will also have opportunities for further exploration using computer packages in Java and Sage. Attendance in this workshop is by nomination only.

Information: <http://www.msri.org/web/msri/scientific/workshops/summer-graduate-workshops/show/-/event/Wm550>.

- * 2–4 **Workshop on Positivity: Positivity in the classification of operator algebras and dynamical systems, in finite- and infinite-dimensional linear algebra, and its outgrowths**, The Fields Institute for Research in Mathematical Sciences, Toronto, Ontario, Canada.

Description: The notion of positivity, whose study is motivated by deep questions in operator algebras, has important applications in a large number of areas of mathematics. These research directions and their outgrowths have been and remain particularly active in

Canada, with David Handelman having been a major contributor over past decades. The workshop is timed to mark David's 60th birthday.

Support: There will be partial financial support available for graduate students and postdocs, with Friday, May 27, 2011 as the deadline for applications and the funding decision made immediately afterwards.

Information: <http://www.fields.utoronto.ca/programs/scientific/11-12/positivity/>.

- * 18–19 **Connections for Women in Quantitative Geometry**, Mathematical Sciences Research Institute, Berkeley, California.

Description: This workshop will provide an introduction to the program on Quantitative Geometry. There will be several short lecture series, given by speakers chosen for the accessibility of their lectures, designed to introduce non-specialists or students to some of the major themes of the program.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm572>.

- * 22–24 **The 36th Sapporo Symposium on Partial Differential Equations**, Department of Mathematics, Hokkaido University, Sapporo, Japan.

Description: The Sapporo Symposium on Partial Differential Equations has been held annually to present the latest developments on PDE with a broad spectrum of interests not limited to the methods of a particular school. This year the invited speakers are: Hua Chen (Wuhan University, Kyoto University); Slim Ibrahim (University of Victoria); Chun Liu (The Pennsylvania State University); Tomoyuki Miyaji (Kyoto University); Yoshinori Morimoto (Kyoto University); Hirokazu Ninomiya (Meiji University); Masahito Ohta (Saitama University); Norbert Pozar (University of California, Los Angeles); Okihiro Sawada (Gifu University); Keisuke Takasao (Hokkaido University); Michio Yamada (Kyoto University); Yusuke Yamauchi (Waseda University).

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/>.

Information: http://www.math.sci.hokudai.ac.jp/sympo/sapporo/program_en.html.

- * 22–26 **Introductory Workshop on Quantitative Geometry**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Quantitative Geometry deals with geometric questions in which quantitative or asymptotic considerations occur. The workshop will provide a mathematical introduction, a foretaste, of the many themes this exciting topic comprises: geometric group theory, theory of Lipschitz functions, large scale and coarse geometry, embeddings of metric spaces, quantitative aspects of Banach space theory, geometric measure theory and of isoperimetry, and more.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm573>.

- * 30–September 3 **The 7th William Rowan Hamilton Geometry and Topology Conference on “The Geometry and Dynamics of Teichmüller Spaces”**, The Hamilton Mathematics Institute, Trinity College, Dublin, Ireland.

Description: The 7th William Rowan Hamilton Geometry and Topology Workshop is a directed workshop on “The Geometry and Dynamics of Teichmüller Spaces”. This year, the workshop will consist of a mini-course August 30–31, followed by a three-day lecture series Thursday, September 1, through Saturday, September 3, 2011.

Information: <http://www.hamilton.tcd.ie/events/gt/gt2011.htm>.

September 2011

- * 1–3 **26th British Topology Meeting**, ICMS, South College Street, Edinburgh, England.

Description: The 26th annual British Topology Meeting will take place at ICMS in Edinburgh September 1–3, 2011.

Invited speakers: Javier Aramayona (Galway), Stefan Friedl (Cologne), Jacob Rasmussen (Cambridge), Saul Schleimer (Warwick), Catharina Stroppel (Bonn), Ulrike Tillmann (Oxford) and Karen Vogtmann (Cornell).

Registration: Participants are required to register by August 1, 2011. See <http://www.maths.gla.ac.uk/~ajb/btop/btop-meetings.html> for a list of previous British Topology Meetings.

Organizer: Jim Howie (Heriot-Watt) and Andrew Ranicki (Edinburgh).

Information: <http://www.icms.org.uk/workshops/btm>.

- * 2–6 **Polynomial Identities in Algebras. II.**, Memorial University of Newfoundland, St. John's, NL, Canada.

Description: The workshop is organized by Atlantic Algebra Centre and financially supported by Atlantic Association for Research in the Mathematical Sciences and Memorial University of Newfoundland. The first workshop under the same title was held at Memorial University of Newfoundland in August – September 2002. Since then the theory of polynomial identities in algebra has experienced a strong development. A number of problems have been solved. New methods have been introduced, in particular, the methods developed in the theory of group gradings of associative, Lie and Jordan algebras. In addition to traditional combinatorial methods, people working on polynomial identities make more frequent use of the representation theory, the theory of Hopf algebras, and techniques involving computers. The aim of this workshop is to survey the main achievements in the area for the last 9 years, discuss the current progress and to determine future directions and outstanding problems.

Information: <http://www.mun.ca/aac/Workshops/Next-Work/>.

- * 6–9 **VI International Meeting on Lorentzian Geometry. Granada 2011**, Science Faculty, University of Granada, Granada, Spain.

Description: Lorentzian Geometry was born as a mathematical theory useful for General Relativity. Nowadays, it constitutes a branch of Differential Geometry where many mathematical techniques are involved (Lie groups and algebras, Partial Differential Equations,

Geometric Analysis, Functional Analysis,...). This meeting is the sixth edition of a biennial series which started in 2001.

Topics: On pure and applied Lorentzian Geometry such as geodesics, submanifolds, causality, black holes, Einstein equations, geometry of spacetimes or AdS-CFT correspondence, will be covered. The meeting will include two minicourses imparted by professors Vladimir Chernov (Dartmouth College, USA) and Paolo Piccione (University of Sao Paulo, Brazil).

Information: <http://gigda.ugr.es/gelogra/>.

- * 12–16 **ISAM-TopMath Summer School 2011: Variational Methods**, Technische Universitaet, Muenchen, Germany.

Description: This is a joint summer school of ISAM (International School of Applied Mathematics) and TopMath on ‘Variational Methods’ open to graduate students and postdocs. A line-up of speakers who are both outstanding researchers and excellent presenters will give state-of-the-art insight into – variational evolution problems (Mielke/Berlin) – optimal transport (Sturm/Bonn) – optimal control of PDE (Casas/Santander) and – applications in materials science (Ortiz/CalTech). A limited amount of funding is available.

Information: <http://www.ma.tum.de/Mathematik/IsamSummerSchoolEn>.

- * 12–16 **Summer School on Partial Differential Equations**, Märkisches Gildehaus, Caputh, Germany.

Description: The aim of the Summer School is to offer young scholars the possibility to get an introduction to recent developments in partial differential equations and their applications by distinguished international experts. Lecture series are given by G. Huisken (MPI Golm), R. Klein (FU Berlin), H. Kozono (Tohoku), F. Otto (MPI Leipzig). The school addresses students working towards a Master’s degree or a Ph.D. Young postdocs are also welcome. Scholarships are available which cover travel expenses and accommodation. For application details, please visit the website.

Information: <http://www.math-conf.uni-hannover.de/pde11>.

- * 18–21 **2011 Federated Conference on Computer Science and Information Systems (FedCSIS)**, Szczecin, Poland.

Call for Papers: Papers should be submitted by June 19th, 2011, using the FedCSIS EasyChair submission system: <http://www.easychair.org/account/signin.cgi?conf=fedcsis2011>. Accepted and presented papers will be published in the IEEE Xplore Digital Library proceedings entitled: “2011 Federated Conference on Computer Science and Information Systems (FedCSIS).” The IEEE proceedings will be published under nonexclusive copyright. The events’ organizers arrange quality journals, edited volumes, etc. and will invite extended and revised papers for post-conference publications (information can be found at the web-sites of individual events).

Information: <http://www.fedcsis.org>.

- * 19–23 **Probabilistic Reasoning in Quantitative Geometry**, Mathematical Sciences Research Institute, Berkeley, California.

Description: “Probabilistic Reasoning in Quantitative Geometry” refers to the use of probabilistic techniques to prove geometric theorems that do not have any a priori probabilistic content. A classical instance of this approach is the probabilistic method to prove existence of geometric objects. Other examples are the use of probabilistic geometric invariants in the local theory of Banach spaces, the more recent use of such invariants in metric geometry, probabilistic tools in group theory, the use of probabilistic methods to prove geometric inequalities, the use of probabilistic reasoning to prove metric embedding results such as Bourgain’s embedding theorem, probabilistic interpretations of curvature and their applications, and the use of probabilistic arguments in the context of isoperimetric problems.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm574>.

* 26–30 **Function Spaces, Weights, and Variable Exponent Analysis**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: The conference is aimed to discuss the current state of the theory of function spaces. In particular, the conference will cover the following topics: Function Spaces of Real Variables (Lebesgue, Lorentz, Orlicz, Sobolev, Nikol'skii-Besov, Lizorkin-Triebel, Morrey, Campanato), Embedding/Duality/Extension theorems, Weights, Weighted inequalities, generalized Lebesgue-Sobolev spaces of variable order. The main topics planned include: 1. Mapping properties of the main operators of harmonic analysis in the classical (Lebesgue, Lorentz, Orlicz, Sobolev, Morrey) spaces and the variable exponent Lebesgue spaces. 2. Spaces with weights, properties of weighted classes, boundedness of operators in the weighted spaces. 3. Approximation theory problems in various function spaces. 4. Spaces of functions with Hölder exponent varying from point to point.

Information: <http://www.crm.cat/cspaces/>.

October 2011

* 1–2 **History and Pedagogy of Mathematics (HPM), Americas Section 2011, West Coast Meeting**, Point Loma Nazarene University, San Diego, California.

First Notice and Call for Papers: HPM seeks a variety of talks on the history of mathematics, the teaching of mathematics, and the history of teaching mathematics. Talks directly relevant to mathematics classrooms are especially welcome. Talks will be 30–40 minutes long. **Information:** Prospective speakers should send a title and abstract, as well as their own contact information to Kathy Clark at: drk-clark@gmail.com. Further details on this meeting should be available by midsummer. For now, please Save the Date. For updated information check, and to read about past meetings, see <http://www.hpm-americas.org>.

* 3–7 **Geometric structures on complex manifolds**, Laboratory of Algebraic Geometry, Higher School of Economics, Moscow, Russia.

Description: Differential-geometric structures play an important role in the study of complex geometry. After Kodaira, Kaehler structures became central in the study of deformation theory and the classification problems. More recently, the non-Kaehler metrics on complex manifolds started to be important in string theory. The manifolds with special holonomy become central in string theory due to advances in supersymmetry. The notion of calibrations, due to Harvey and Lawson, gives a unifying differential-geometric mechanism encompassing the complex geometry and its many generalizations to quaternionic and octonionic domains. We are planning to bring together specialists on complex geometry, potential theory and calibrations, to explore the recent advances in differential geometry of complex manifolds.

Information: <http://bogomolov-lab.ru/GS/>.

* 19–21 **Celebration of Mathematical Sciences in Commemoration of the Centennial of the Birth of Shiing-Shen Chern**, Institute of Mathematics, Academia Sinica, 6F, Astronomy-Mathematics Building, No. 1, Sec. 4, Roosevelt Road, Taipei, Taiwan 10617.

Description: Professor Shiing-Shen Chern was one of the founding fathers of the Institute of Mathematics of the Academia Sinica, and had remained one of its leading supporters his entire life. On the occasion of his 100th birthday, the Institute of Mathematics, Academia Sinica, Taipei, will hold the international conference “Celebration of Mathematical Sciences in Commemoration of the Centennial of the Birth of Shiing-Shen Chern.”

Plenary speakers: Luis Caffarelli (Texas), Jih-Hsin Cheng (Academia Sinica), Kenji Fukaya (Kyoto), Gerhard Huisken (Max Planck), Maxim Kontsevich (IHES), Ko-Wei Lih (Academia Sinica), Richard Schoen (Stanford), Yum-Tong Siu (Harvard), Chuu-Liang Terng (UC Irvine), Cedric Villani (Institute H. Poincaré). **Scientific committee:** K. Fukaya (Kyoto), T.-P. Liu (Academia Sinica), R. Schoen (Stanford), Y.-T. Siu (Harvard).

Local organizing committee: J.-H. Cheng (Academia Sinica), J.-N. Wang (NTU), C. Chen (NCTU), M.-K. Chuah (NTHU), R.-L. Sheu (NCKU). **Information:** <http://www.math.sinica.edu.tw>.

* 19–21 **Celebration of Mathematical Sciences in Commemoration of the Centennial of the Birth of Shiing-Shen Chern**, Institute of Mathematics, Academia Sinica, 6F, Astronomy-Mathematics Building, No. 1, Sec. 4, Roosevelt Road, Taipei, Taiwan 10617.

Description: Professor Shiing-Shen Chern was one of the founding fathers of the Institute of Mathematics of the Academia Sinica, and had remained one of its leading supporters his entire life. On the occasion of his 100th birthday, the Institute of Mathematics, Academia Sinica, Taipei, will hold the international conference “Celebration of Mathematical Sciences in Commemoration of the Centennial of the Birth of Shiing-Shen Chern.”

Plenary speakers: Luis Caffarelli (Texas), Jih-Hsin Cheng (Academia Sinica), Kenji Fukaya (Kyoto), Gerhard Huisken (Max Planck), Maxim Kontsevich (IHES), Ko-Wei Lih (Academia Sinica), Richard Schoen (Stanford), Yum-Tong Siu (Harvard), Chuu-Liang Terng (UC Irvine), Cedric Villani (Institute H. Poincaré).

Scientific committee: K. Fukaya (Kyoto), T.-P. Liu (Academia Sinica), R. Schoen (Stanford), Y.-T. Siu (Harvard). **Local organizing committee:** J.-H. Cheng (Academia Sinica), J.-N. Wang (NTU), C. Chen (NCTU), M.-K. Chuah (NTHU), R.-L. Sheu (NCKU).

Information: <http://www.math.sinica.edu.tw>.

* 21–22 **National Conference on “Role of Mathematical and Physical Sciences in Engineering and Technology”**, Government Degree College Karanprayag (Chamoli), Uttarakhand, India.

Description: The conference provides a unique opportunity for in-depth technical discussions and exchange of ideas in mathematical and physical sciences, as well as their role in natural and social sciences, engineering and technology, industry and finance. It offers to researchers, industrialists, engineers and students from different parts of the country as well as from the remote part of the Uttarakhand state to present their latest research, to interact with the experts in the field, and to foster interdisciplinary collaborations required to meet the challenges of modern science, technology, and society.

Information: <http://sites.google.com/site/drgauraviitr/homepage/activities>.

* 22–24 **The 5th International Conference on Research and Education in Mathematics (ICREM5)**, Institut Teknologi Bandung, Bandung, Indonesia.

Description: The International Conference on Research and Education in Mathematics (ICREM) is a biennial conference, started in 2001. It covers all aspects of mathematical sciences as well as mathematical education. It is jointly organized by Faculty of Mathematics and Natural Sciences, Institut Teknologi Bandung, Institute for Mathematical Research, Universiti Putra Malaysia (INSPEM), and Institute of Mathematics, Vietnam Academy of Science & Technology (IMVAST). **Keynote Speaker:** Cedric Villani (Institute Henri Poincaré, France), Fields Medalist 2010, supported by International Mathematics Union (IMU); Abdus Salam International Centre for Theoretical Physics (ICTP); United Nations Educational, Scientific and Cultural Organization (UNESCO); Indonesian Combinatorial Society (InaComBS); and Indonesian Mathematical Society (IndoMS) (IndoMS).

Information: <http://www.math.itb.ac.id/~icrem5/>.

* 30–November 5 **Chern Centennial Conference**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The Mathematical Sciences Research Institute (MSRI) in conjunction with the Chern Institute of Mathematics (CIM) in Tianjin, China, celebrates the centennial of the birth of Shiing-Shen Chern, one of the greatest geometers of the 20th century and MSRI's co-founder. In commemoration of Chern's work, MSRI and CIM will implement an international mathematics conference. During the first week, October 24 to 28, 2011, the conference will take place at

CIM in Tianjin, China and during the second week, October 30 to November 5, 2011, the conference will be at the MSRI in Berkeley, USA.
Information: Further information about the first week at CIM can be found here: <http://www.nim.nankai.edu.cn/activites/conferences/Chern-Centennial-20111024/index.htm>. For general information visit: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm555>.

December 2011

- * 12–16 **ICREA Conference on Approximation Theory and Fourier Analysis**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: The key idea of the conference is the interdisciplinary connection between Fourier Analysis and Approximation Theory. The main goal of this conference is to reveal new (and clarify known) relations between problems and methods of Fourier Analysis and Approximation Theory and to promote the integration of these areas.
Information: <http://www.crm.cat/icreaapproximation>.

January 2012

- * 16–20 **Introductory Workshop: Lattice Models and Combinatorics**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Research at the interface of lattice statistical mechanics and combinatorial problems of “large sets” has been an exciting and fruitful field in the last decade or so. In this workshop we plan to develop a broad spectrum of methods and applications, spanning the spectrum from theoretical developments to the numerical end. This will cover the behaviour of lattice models at a macroscopic level (scaling limits at criticality and their connection with SLE) and also at a microscopic level (combinatorial and algebraic structures), as well as efficient enumeration techniques and Monte Carlo algorithms to generate these objects.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm578>.

February 2012

- * 13–17 **Conference and MAGMA Workshop on “Symmetries of Discrete Objects”**, Rydges Lakeland Resort Hotel, Queenstown, New Zealand.

Description: This event will be a combination of a research conference on symmetries of discrete objects (such as graphs, maps/dessins, polytopes, Riemann surfaces and other complexes), and a MAGMA workshop, including some instructional courses (well suited for graduate students) on the MAGMA package and its capabilities (especially for handling discrete structures and their automorphisms). The aim of the conference is to bring together researchers working in various inter-related fields, introduce their approaches and discoveries to one another, and to promote joint research in and between these fields. To achieve this we will have a small number of keynote talks, several contributed talks, at least one open problem session, and ample time for discussions and problem solving. Anyone with interest in automorphisms of discrete structures is welcome to consider attending.

Information: <http://www.math.auckland.ac.nz/~conder/SODO-2012/>.

- * 20–24 **Percolation and Interacting Systems**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Over the last ten years there has been spectacular progress in the understanding of geometrical properties of random processes. Of particular importance in the study of these complex random systems is the aspect of their phase transition (in the wide sense of an abrupt change in macroscopic behavior caused by a small variation in some parameter) and critical phenomena, whose applications range from physics, to the performance of algorithms on networks, to the survival of a biological species. The aim of this

workshop is to share and attempt to push forward the state-of-the-art understanding of the geometry and dynamic evolution of these models, with a main focus on percolation, the random cluster model, Ising and other interacting particle systems on lattices.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm579>.

March 2012

- * 14–16 **IAENG International Conference on Operations Research 2012**, Royal Garden Hotel, Kowloon, Hong Kong.

Description: The conference ICOR'12 is held under the International MultiConference of Engineers and Computer Scientists 2012. The IMECS 2012 is organized by the International Association of Engineers (IAENG), a non-profit international association for the engineers and the computer scientists. The topics of the ICOR'12 include, but are not limited to, the following: management science, managerial economics, systems thinking and analysis, optimization integer programming, linear programming, nonlinear programming, assignment problem, transportation network design, simulation, statistical analysis, stochastics, modelling reliability and maintenance, queueing theory, game theory, graph theory, OR algorithms and software developments, OR applications and case studies.

Information: <http://www.iaeng.org/IMECS2012/ICOR2012.html>.

- * 26–30 **AIM Workshop: Cohomological methods in abelian varieties**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to the integral motive, Chow groups and étale cohomology of abelian varieties, and applications to arithmetic geometry.

Information: <http://www.aimath.org/ARCC/workshops/cohomabelian.html>.

April 2012

- * 1–4 **The 8th International Conference on Scientific Computing and Applications (SCA2012)**, University of Nevada Las Vegas (UNLV), Las Vegas, Nevada.

Description: This will be the 8th in the sequence of conferences on scientific computing and applications (SCA) held in the Pacific Rim region (held previously in China, Canada, Hong Kong, Korean). This is the first time to be held in USA. The purpose of the meeting is to provide a forum for researchers working on various aspects of scientific computing and applications to meet and move this area forward.
Co-Chairs of local organizing committee: Jichun Li and Hongtao Yang (Univ of Nevada Las Vegas, USA).

Important Deadlines: November 1, 2011: Mini-symposium proposal due. December 1, 2011: Abstracts for all talks due.

Information: <http://www.unlv.edu/centers/cams/sca2012/sca2012.html>.

- * 2–4 **SIAM Conference on Uncertainty Quantification (UQ12)**, Raleigh Marriott City Center Hotel, Raleigh, North Carolina.

Description: Uncertainty quantification is key for achieving validated predictive computations in a wide range of scientific and engineering applications. The field relies on a broad range of mathematics and statistics groundwork, with associated algorithmic and computational development. This conference strives to bring together an interdisciplinary mix of mathematicians, statisticians, scientists, and engineers with an interest in development and implementation of uncertainty quantification methods. The goal of the meeting is to provide a forum for the sharing of ideas, and to enhance communication among this diverse group of technical experts, thereby contributing to future advances in the field.

Information: <http://www.siam.org/meetings/uq12/>.

- * 2–6 **AIM Workshop: Vector equilibrium problems and their applications to random matrix models**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to the study of vector equilibrium problems and their application to the asymptotic analysis of random matrix models.

Information: <http://aimath.org/ARCC/workshops/vectorequilib.html>.

- * 30-May 5 **Random Walks and Random Media**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The field of random media has been the object of intensive mathematical research over the last thirty years. It covers a variety of models, mainly from condensed matter physics, physical chemistry, and geology, where one is interested in materials which have defects or inhomogeneities. These features are taken into account by letting the medium be random. It has been found that this randomness can cause very unexpected effects in the large scale behavior of these models; on occasion these run contrary to the prevailing intuition. A feature of this area, which it has in common with other areas of statistical physics, is that what was initially thought to be just a simple toy model has turned out to be a major mathematical challenge.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm581>.

May 2012

- * 14-18 **AIM Workshop: ACC for minimal log discrepancies and termination of flips**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to two closely connected conjectures in the minimal model program.

Information: <http://www.aimath.org/ARCC/workshops/accflips.html>.

- * 17-19 **International Conference on "Applied Mathematics and Approximation Theory 2012"**, TOBB University of Economics and Technology, Ankara, Turkey.

Description: Celebrating the 60th birthday of Professor George Anastassiou.

Organizer: Oktay Duman, oduman@etu.edu.tr.

Topics: Applied Mathematics and Approximation Theory in the broad sense.

Plenary Speakers: George Anastassiou, Martin Bohner, Dimitru Baleanu, Heiner Gonska, Weimin Han, Cihan Orhan.

International Organizing Committee: Jerry Bona, Sever Dragomir, Sorin Gal, Narendra Govil, Anna Kaminska, Ram Mohapatra, Gaston N'Guerekata, Richard Zalik.

Information: <http://amat2012.etu.edu.tr/>.

- * 21-25 **AIM Workshop: Contact topology in higher dimensions**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to developing high dimensional contact topology.

Information: <http://www.aimath.org/ARCC/workshops/contacttop.html>.

June 2012

- * 12-15 **"The Incomputable" — A workshop of the 6-month Isaac Newton Institute programme — "Semantics and Syntax: A Legacy of Alan Turing" (SAS)**, Kavli Royal Society International Centre, Chicheley Hall, Newport Pagnell MK16 9JJ, United Kingdom.

Description: The Incomputable is one of a series of special events, running throughout the Alan Turing Year, celebrating Turing's unique impact on mathematics, computing, computer science, informatics, morphogenesis, philosophy and the wider scientific world. It is held in association with the Turing Centenary Conference (CiE 2012) in Cambridge the following week, which will run up to the June 23rd centenary of Turing's birth, and will culminate with a birthday celebration at Turing's old college, King's College, Cambridge. The

Incomputable is unique in its focus on the mathematical theory of incomputability, and its relevance for the real world. This is a core aspect of Turing's scientific legacy — and this meeting for the first time reunites (in)computability theory and 'big science' in a way not attempted since Turing's premature passing. In 2012, the annual Workshop on Computability Theory is being held in conjunction with The Incomputable.

Contact: S. Barry Cooper; email: pmt6sbc@leeds.ac.uk.

Information: <http://www.mathcomp.leeds.ac.uk/turing2012/inc/>.

- * 18-23 **Turing Centenary Conference (CiE 2012): How the World Computes**, University of Cambridge, Cambridge, United Kingdom.

Description: CiE 2012 is one of a series of special events, running throughout the Alan Turing Year, celebrating Turing's unique impact on mathematics, computing, computer science, informatics, morphogenesis, philosophy and the wider scientific world. Its central theme is the computability-theoretic concerns underlying the broad spectrum of Turing's interests, and the contemporary research areas founded upon and animated by them. In this sense, CiE 2012, held in Cambridge in the week running up to the centenary of Turing's birthday, deals with the essential core of what made Turing's contribution so influential and long-lasting. CiE 2012 promises to be an event worthy of the remarkable scientific career it commemorates.

Invited speakers: Veronica Becher, Lenore Blum, Rodney Downey, Yuri Gurevich, Juris Hartmanis, Andrew Hodges, Richard Jozsa, Stuart Kauffman, Paul Smolensky, James Murray, Leslie Valiant.

Deadline: For submissions: January 27, 2012.

Contact: email: anuj.dawar@cl.cam.ac.uk.

Information: <http://www.cie2012.eu>.

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 2012

- * 6-11 **XVII International Congress on Mathematical Physics (ICMP12)**, Aalborg Kongress og Kultur Center, Europa Plads 4, 9000 Aalborg, Denmark.

Description: The International Association of Mathematical Physics (IAMP) and the Local Organizing Committee invite you to participate in the XVII International Congress on Mathematical Physics (ICMP12). It will be held in Aalborg, Denmark, August 6-11, 2012. The International Congress on Mathematical Physics is held every three years. It is a major event in the mathematical physics community. The congress will present new results and future challenges, in a series of plenary lectures and topical sessions.

Information: <http://www.icmp12.com/>.

- * 20-24 **AIM Workshop: Invariants in convex geometry and Banach space theory**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to the study of invariants related to a few important problems at the intersection of geometric analysis and Banach space theory.

Information: <http://www.aimath.org/ARCC/workshops/convexbanach.html>.

- * 27-September 7 **Joint Introductory Workshop: Cluster Algebras and Commutative Algebra**, Mathematical Sciences Research Institute, Berkeley, California.

Description: This workshop will take place at the opening of the MSRI special programs on Commutative Algebra and on Cluster Algebras. It will feature lecture series at different levels, to appeal to a wide variety of participants. There will be minicourses on the

basics of cluster algebras, and others developing particular aspects of cluster algebras and commutative algebra.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm557>.

September 2012

- * 3–9 **International Conference on Differential-Difference Equations and Special Functions**, University of Patras, Patras, Greece.

Description: The conference is dedicated to the memory of Professor Panayiotis D. Sifariakas, who left so early in 2010 and its main aim is to bring together experts working in all areas (including numerical investigations and applications) of differential equations, difference equations and special functions and to promote the research in these areas.

Information: <http://www.icddesf.upatras.gr>.

- * 22–23 **AMS Eastern Section Meeting**, Rochester Institute of Technology, Rochester, New York.

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

October 2012

- * 2–4 **SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI12)**, The Curtis, A Doubletree by Hilton, Denver, Colorado.

Description: The SIAM conferences on Mathematics for Industry focus attention on the many and varied opportunities to promote applications of mathematics to industrial problems. From the start of planning for these conferences, the major objective has been the development and encouragement of industrial, government and academic collaboration. The format of this conference provides a forum for industrial and government engineers and scientists to communicate their needs, objectives and visions, to the broad mathematical community.

Information: <http://www.siam.org/meetings/mi12/>.

- * 13–14 **AMS Southeastern Section Meeting**, Tulane University, New Orleans, Louisiana.

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

- * 20–21 **AMS Central Section Meeting**, University of Akron, Akron, Ohio.

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

- * 27–28 **AMS Western Section Meeting**, University of Arizona, Tucson, Arizona.

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

January 2013

- * 24–25 **Connections for Women: Noncommutative Algebraic Geometry and Representation Theory**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The Connections for Women workshop associated with the MSRI program in noncommutative algebraic geometry and representation theory is intended to bring together women who are working in these areas in all stages of their careers. As the first event in the semester, this workshop will feature a “tapas menu” of current research and open questions: light but intriguing tastes, designed to encourage further exploration and interest. Talks will be aimed at a fairly general audience and will cover diverse topics within the theme of the program. In addition, there will be a poster session for graduate students and recent Ph.D. recipients and a panel discussion on career issues, as well as free time for informal discussion.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9061>.

- * 28–February 1 **Introductory Workshop: Noncommutative Algebraic Geometry and Representation Theory**, Mathematical Sciences Research Institute, Berkeley, California.

Description: This workshop will provide several short lecture series consisting of two or three lectures each to introduce postdocs, graduate students and non-experts to some of the major themes of the conference. While the precise topics may change to reflect developments in the area, it is likely that we will run mini-series in the following subjects: noncommutative algebraic geometry; D-module theory; derived categories; noncommutative resolutions of singularities; deformation-quantization; symplectic reflection algebras; growth functions of infinite dimensional algebras.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9062>.

April 2013

- * 8–12 **Interactions between Noncommutative Algebra, Representation Theory, and Algebraic Geometry**, Mathematical Sciences Research Institute, Berkeley, California.

Description: In recent years there have been increasing interactions between noncommutative algebra/representation theory on the one hand and algebraic geometry on the other. This workshop would aim to examine these interactions and, as importantly, to encourage the interactions between the three areas. The precise topics will become more precise nearer the time, but will certainly include: Noncommutative algebraic geometry; noncommutative resolutions of singularities and Calabi-Yau algebras; symplectic reflection and related algebras; D-module theory; deformation-quantization.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9063>.

August 2013

- * 5–9 **XXII Rolf Nevanlinna Colloquium**, Helsinki, Finland.

Description: For further information, please contact Kirsi Peltonen, Aalto University; email: kirsi.peltonen@tkk.fi.