
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/>.

November 2012

* 2 **Conference on Mathematical Finance and Partial Differential Equations**, Rutgers, The State University of New Jersey, New Brunswick, New Jersey.

Description: Partial differential equations, probability, and analytical methods are fundamental in the modeling and description of financial markets. The purpose of this meeting is to highlight the new methods, directions and the most recent research in partial differential equations, probability, stochastic control, numerical analysis, and their application to mathematical finance. The meeting encourages the participation of academic and industry researchers in this field and contributions on related topics are welcome.

Information: <http://www.finmath.rutgers.edu/mfpde2012>.

* 8 **Cahit Arf Lecture 2012 by David E. Nadler titled Traces and Loops**, Mathematics Department, Middle East Technical University, Ankara, Turkey.

Description: This talk will focus on the interplay between two basic notions originating in algebra and topology. In algebra, there is the trace of a matrix, important for its equality with the sum of the eigenvalues of the matrix. In topology, there are the loops on a space, which play a central role in the computation of homotopy groups and in the structure theory of spaces. There is a well-developed understanding of the intimate relation between traces and loops coming from non-commutative geometry and mathematical physics. We will

explain how modern formulations elucidate fundamental identities in geometry and representation theory.

Information: <http://www.matematikvakfi.org.tr/en/arf-lectures>.

* 10-11 **The Fifth Dr. George Bachman Memorial Conference**, Manhattan Campus of St. John's University, Manhattan, New York.

Description: We welcome submissions of papers to be presented at the conference. The papers may be in any area of mathematics. Accepted articles will be published in "The Proceedings of the Fifth Dr. George Bachman Memorial Conference".

Organizers: For further information, kindly contact the organizers: Dr. Edward Beckenstein, email: Drbeckense@aol.com; Dr. Charles Traina, email: trainac@stjohns.edu.

Deadline: Abstracts should be received by October 4, 2012.

December 2012

* 7-9 **17th Annual Conference of Gwalior Academy of Mathematical Sciences and National Symposium on Computational Mathematics and Information Technology**, Department of Mathematics, Department of CSE, Jaypee University of Engineering & Technology, A. B. Road, Raghogarh Distt. Guna-M.P, India-473226.

Description: In recent years there have been exciting developments in all branches of mathematics and information technology. Rapid programs in computer related fields based on mathematical sciences have created a lot of gales in the branches. The main objective

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/>.

of the conference is to bring Mathematicians, Industrialists, Computer Scientists, etc., together on one platform to interact with each other, share knowledge, exchange views, and discuss the topics of mutual interests and develop interdisciplinary groups for fruitful applications of mathematics & IT Industries. It also aims at presenting and discussing recent developments in mathematics & information technology.

Call for Papers: Original research papers, review of special topics, survey articles on recent developments in applicable mathematics & IT are invited for presentation at the conference. Intended participants are invited to send the abstracts (not exceeding 250 words) of their papers to the email: conference.juet@yahoo.com.

Deadline: Last date of paper submission is September 30, 2012.

Information: <http://www.juet.ac.in>.

* 9-13 **15th International Conference of International Academy of Physical Sciences (CONIAPS XV)**, Rajamangala University of Technology Thanyaburi, Pathumthani, Thailand.

Main topics: Will include a broad set of research areas such as: Physics, mathematics and statistics, chemistry, computer science, bio-informatics, bio-physics and bio-chemistry, material sciences, environmental sciences, etc.

Description: The conference will bring together scientists, engineers, technicians, educators, and students to exchange and share their experiences, new ideas, and all other aspects of their research (theory, applications and tools). The conference will include keynote address, fellowship award lectures and other plenary lectures, invited lectures, paper presentations (oral and poster).

Information: <http://www.iaps.in/coniaps>.

* 16-18 **Southeastern Lie Theory Workshop: Vertex Algebras, Conformal Field Theory, and Integrable Systems**, College of Charleston, Charleston, South Carolina.

Description: Researchers from all areas of Lie Theory (including, but not limited to, representation theory, Vertex algebras, integrable systems, and applications of Lie algebras to mathematical physics) will be presenting their research in 45 to 50 minute talks.

Support: Modest support from the conference grant may be available to graduate students, postdocs, junior faculty, women, and members of underrepresented minority groups. Please contact one of the organizers for more info. Graduate students are encouraged to share the hotel room with another participant. We will let you know after November 10 if any partial support will be available from the conference. Please let us know if you need an answer before November 10, 2012.

Information: <http://math.cofc.edu/research/selie/index.php>.

* 18-21 **5th HiPC Student Research Symposium (SRS) *** Held in conjunction with the 19th International Conference on High Performance Computing (HIPC 2012)**, Pune, India.

Call for Extended Abstracts: The Student Research Symposium (SRS) at HiPC is organized to stimulate and foster student engagement in high performance computing (HPC) research, and to provide an international forum to highlight student research accomplishments in HPC. The symposium will also expose students to the latest research and best practices in the HPC community from academia and industry.

Last year, HiPC SRS featured 21 papers and 18 posters, which were accepted from 51 submissions from seven countries. Besides presentations and poster exhibits by student authors, the one-day symposium this year will feature invited talks by leading HPC researchers/practitioners. The HiPC conference reception will provide an opportunity for students to interact with HPC researchers and practitioners (and recruiters) from academia and industry.

Important Dates: Sept. 23, 2012: Submission Deadline. Oct. 21, 2012: Accept/Reject Decision Notification. Dec. 18, 2012: Symposium.

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

February 2013

* 4-5 **2nd Annual International Conference on Computational Mathematics, Computational Geometry & Statistics (CMCGS 2013)**, Hotel Fort Canning, Singapore, Singapore.

Description: The objectives of this conference are to provide a forum for researchers, educators, students, contributors, users of mathematical knowledge and industries to exchange ideas and communicate and discuss research findings and new advancement in mathematics and statistics; to explore possible avenues to foster academic and student exchange, as well as scientific activities; to promote and encourage exchange of ideas on recent discoveries in the field of mathematics, statistics and mathematical education.

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

* 11-14 **The AMSI Workshop on Graph C^* -algebras, Leavitt path algebras and symbolic dynamics**, University of Western Sydney, Australia.

Description: The workshop will bring together international experts to develop the emerging connections between the traditionally disparate fields of Leavitt path algebras and graph C^* -algebras. The workshop is also motivated by the desire to present an accessible introduction to the two theories side by side—highlighting the interplay between them—to prospective and starting Ph.D. students and early career researchers.

Main Speakers: Gene Abrams (Colorado), Pere Ara (Barcelona), Gonzalo Aranda Pino (Malaga), Anthony Bak (Bielefeld), Xiao-Wu Chen (Hefei), Astrid an Huef (Otago), Enrique Pardo (Cádiz), David Pask (Wollongong), Iain Raeburn (Otago), Mercedes Siles Molina (Malaga), S. Paul Smith (Washington).

Organizers: R. Hazrat (r.hazrat@uws.edu.edu) and Aidan Sims (asims@uow.edu.au).

Information: <http://sites.google.com/site/amsiuws2012/>.

April 2013

* 4-6 **38th Arkansas Spring Lecture Series in the Mathematical Sciences: "Extension and Interpolation of Functions"**, University of Arkansas, Fayetteville, Arkansas.

Description: The principal speaker will be Charles Fefferman (Princeton University), on the topic of "Extension and Interpolation of Functions." There will also be talks by invited speakers. Applications for contributed talks by junior mathematicians are strongly encouraged. For further information, please contact Phil Harrington; email: psharrin@uark.edu.

Information: <http://math.uark.edu/3742.php>.

* 12-13 **New Frontiers in Numerical Analysis and Scientific Computing**, Kent State University, Kent, Ohio.

Description: The conference will be held for the occasion of Lothar Reichel's 60th birthday and on the 20th anniversary of the journal *ETNA*.

Registration deadline: December 15, 2012.

Supporter: National Science Foundation. A number of travel supports are available to encourage participation by individuals who lack other federal support, or who are students, post-doctoral scholars, junior faculty, to enhance the breadth and diversity of the participants. The support will cover all or part of the participant's transportation and local lodging expenses. Information on application of the travel support is available on the conference website.

Information: <http://www.math.kent.edu/~li/LR60/>.

* 15-17 **Geomathematics 2013**, Hotel Haus am Weinberg, Sankt Martin, Palatinate, Germany.

Description: Geomathematics is an emerging new scientific area. Its increasing importance is due to visionary scientists such as Willi Freeden, whose 65th birthday is celebrated by this conference. This workshop is dedicated to the interdisciplinary research of mathematicians and geoscientists and contributes to the international

year "Mathematics of Planet Earth 2013". It provides a platform for scientists working in the intersection of mathematics and the geosciences to present and discuss novel solutions and open problems. Besides the invited lectures, contributed talks, in particular also by junior scientists, from all areas of the interface of mathematics and the geosciences are welcome.

Information: <http://www.geomathematics2013.de>.

May 2013

- * 27-31 **Summer School on Topics in Space-Time Modeling and Inference**, Aalborg University, Department of Mathematical Sciences, Aalborg, Denmark.

Lecturers: Professor Peter Diggle, Lancaster University; Professor Tilmann Gneiting, University of Heidelberg; Professor Peter F. Craigmile, Ohio State University; Professor Rasmus Waagepetersen, Aalborg University.

Organizer: Professor Jesper Møller Aalborg University.

Information: <http://csgb.dk/activities/2013/space-timemodeling/>.

June 2013

- * 10-14 **AIM Workshop: Automorphic forms and harmonic analysis on covering groups**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to discussing extensions of the Langlands program to nonlinear groups in some generality. An important example of such group is the metaplectic group: the two-fold cover the symplectic group over a local field.

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

- * 17-28 **Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Modern algebraic topology is a broad and vibrant field which has seen recent progress on classical problems as well as exciting new interactions with applied mathematics. This summer school will consist of a series of lectures by experts on major research directions, including several lectures on applied algebraic topology. Participants will also have the opportunity to have guided interaction with the seminal texts in the field, reading and speaking about the foundational papers.

Information: <http://www.msri.org/web/msri/scientific/workshops/summer-graduate-workshops/show/-/event/Wm9603>.

- * 26-29 **International Symposium on Symbolic and Algebraic Computation (ISSAC)**, Northeastern University, Boston, Massachusetts.

Description: ISSAC is the premier conference for research in symbolic computation and computer algebra. This includes the design, development and application of algebraic algorithms and computer algebra systems like MAPLE and MATHEMATICA. Other areas of research include computational number theory, computational group theory, exact linear algebra and (differential) algebraic geometry. The conference traditionally presents a range of invited speakers, tutorials, poster sessions and software demonstrations with a centre-piece of between 40 to 50 contributed research papers.

Deadline: For paper submission for ISSAC 2013 is mid-January, 2013.

Information: <http://www.issac-conference.org/2013/>.

- * 27 **5th National Dyscalculia and Maths Learning Difficulties Conference, UK**, Cumberland Hotel, London, England.

Description: This unique conference, now in its fifth year, brings together the worlds of research, maths teaching and SEN expertise.

Three keynote speakers: Dr. Daniel Ansari, Dr. Derek Haylock and Dr. Ruth Trundle plus three breakout sessions, six streams, eleven workshop themes provide you with cutting edge research and

opportunities to engage with leading practitioners from schools, FE and HE institutions. Early Bird prices available until December 21, 2012.

Information: <http://www.dyscalculia-maths-difficulties.org.uk/>.

- * 30-July 20 **IAS/PCMI Summer 2013: Geometric Analysis**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Please visit the PCMI workshop home page for further details on the subject and the format of the summer school. Complete information will be available on November 1, 2012.

Information: <http://www.msri.org/web/msri/scientific/workshops/summer-graduate-workshops/show/-/event/Wm9754>.

July 2013

- * 1-5 **The 6th Pacific RIM Conference on Mathematics 2013**, Sapporo Convention Center, Sapporo City, Japan.

Description: The Pacific Rim Conference on Mathematics has been held triannually to present the latest topics in various areas of mathematics. Past meetings were held in Hong Kong (1998), Taipei (2001), Shanghai (2005), Hong Kong (2007), Stanford (2010). With several focusing sessions the conference emphasizes survey lectures by world-leading specialists on pure and applied mathematics to boost interactions and in-depth discussions among researchers in mathematics and related fields.

Organizers: Y. Giga (Univ. of Tokyo), K. Yamaguchi (Hokkaido Univ.).
Local Organizers: S. Jimbo (Hokkaido Univ.), H. Terao (Hokkaido Univ.).

Participating Institutions: City Univ. of Hong Kong, Academia Sinica (Taipei), Seoul National Univ., National Univ. of Singapore, Fudan Univ., Australian National Univ., Stanford Univ., UC Berkeley, UCLA, Pacific Institute for the Mathematical Sciences, Univ. of Auckland, Pontifical Catholic Univ. of Chile, Kyoto Univ., Tohoku Univ., Meiji Univ., Hokkaido Univ., Univ. of Tokyo.

Information: <http://www.math.sci.hokudai.ac.jp/sympo/130701/>.

- * 1-12 **New Geometric Techniques in Number Theory**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The branches of number theory most directly related to automorphic forms have seen enormous progress over the past five years. Techniques introduced since 2008 have made it possible to prove many new arithmetic applications. The purpose of the current workshop is to draw the attention of young students or researchers to new questions that have arisen in the course of bringing several chapters in the Langlands program and related algebraic number theory to a close. We will focus especially on some precise questions of a geometric nature, or whose solutions seem to require new geometric insights. A graduate level in number theory is expected. This two-week workshop will be devoted to the following subjects: Automorphy lifting theorems, p-adic local Langlands program, characters of categorical representations and Hasse-Weil zeta function.

Information: <http://www.msri.org/web/msri/scientific/workshops/summer-graduate-workshops/show/-/event/Wm9460>.

- * 2-5 **The 4th International Conference on Matrix Analysis and Applications**, Konya, Turkey.

Description: The purpose of this conference is to stimulate research in matrix analysis and its applications, to provide an opportunity for researchers to present their newest results, and to meet for informal discussions. Scientific researchers with related work in all fields are welcome.

Keynote speaker: Steve Kirkland, Stokes Professor at Hamilton Institute, National University of Ireland.

Guest speaker: Alexander A. Klyachko, Bilkent University, Ankara, Turkey.

Scientific organizing committee (SOC): Peter Semrl (University of Ljubljana, Slovenia), Tin-Yau Tam (Auburn University, USA), Qingwen Wang (Shanghai University, China), and Fuzhen Zhang (Nova Southeastern University, USA). The meeting is endorsed by the International Linear Algebra Society (ILAS).

Information: <http://icmaa2013.selcuk.edu.tr/>.

* 3-5 **The 2013 International Conference of Applied and Engineering Mathematics**, Imperial College London, London, United Kingdom.

Description: The conference ICAEM'13 is held under the World Congress on Engineering 2013. The WCE 2013 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 IAENG conferences attracted more than one thousand participants from over 30 countries. All submitted papers will be under peer review and accepted papers will be published in the conference proceeding (ISBN: 978-988-19251-0-7). 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.

Information: <http://www.iaeng.org/WCE2013/ICAEM2013.html>.

* 29-August 9 **Introduction to the Mathematics of Seismic Imaging**, Mathematical Sciences Research Institute, Berkeley, California.

Description: In this two week program we will develop some of the mathematical foundations of seismic imaging that is a basic tool used in "Imaging the Earth Interior". This is one of the components of the Mathematics of Planet Earth year in 2013. The goal in seismic imaging is to determine the inner structure of the Earth from the crust to the inner core by using information provided by earthquakes in the case of the deep interior or by measuring the reflection of waves produced by acoustic or elastic sources on the surface of the Earth. The mathematics of seismic imaging involves solving inverse problems for the wave equation. No previous experience on inverse problems will be assumed.

Information: <http://www.msri.org/web/msri/scientific/workshops/summer-graduate-workshops/show/-/event/Wm9427>.

August 2013

* 12-15 **International Conference on Algebra in Honour of Patrick Smith and John Clark's 70th Birthdays**, Balikesir, Turkey.

Description: This conference is devoted to all branches of algebra.
Information: <http://ica.balikesir.edu.tr/>.

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.

January 2014

* 20-May 23 **Algebraic Topology Program**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Algebraic topology touches almost every branch of modern mathematics. Algebra, geometry, topology, analysis, algebraic geometry, and number theory all influence and in turn are influenced by the methods of algebraic topology. The goals of this 2014 program at MSRI are: Bring together algebraic topology researchers from all subdisciplines, reconnecting the pieces of the field, identify the fundamental problems and goals in the field, uncovering the broader themes and connections, connect young researchers with the field, broadening their perspective and introducing them to the myriad approaches and techniques.

Information: <http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm8964>.

February 2014

* 3-7 **Introductory Workshop: Model Theory, Arithmetic Geometry and Number Theory**, Mathematical Sciences Research Institute, Berkeley, California.

Description: Model theory is a branch of mathematical logic whose structural techniques have proven to be remarkably useful in arithmetic geometry and number theory. We will introduce in this workshop some of the main themes of the programme covering such topics as Additive Combinatorics, Algebraic Dynamics, Berkovich Spaces, and the Pink-Zilber Conjectures. Tutorials will be given by both model theorists and experts in the relevant field of application. The workshop will also include "state of the art" lectures on the programme topics, indicating recent results as well as directions for future work.

Information: <http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9549>.

August 2014

* 11-December 12 **New geometric methods in number theory and automorphic forms**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The branches of number theory most directly related to the arithmetic of automorphic forms have seen much recent progress, with the resolution of many longstanding conjectures. These breakthroughs have largely been achieved by the discovery of new geometric techniques and insights. The goal of this program is to highlight new geometric structures and new questions of a geometric nature which seem most crucial for further development. In particular, the program will emphasize geometric questions arising in the study of Shimura varieties, the p-adic Langlands program, and periods of automorphic forms.

Information: <http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm8996>.

* 18-December 19 **Geometric Representation Theory**, Mathematical Sciences Research Institute, Berkeley, California.

Description: The fundamental aims of geometric representation theory are to uncover the deeper geometric and categorical structures underlying the familiar objects of representation theory and harmonic analysis, and to apply the resulting insights to the resolution of classical problems. One of the main sources of inspiration for the field is the Langlands philosophy, a vast nonabelian generalization of the Fourier transform of classical harmonic analysis, which serves as a visionary roadmap for the subject and places it at the heart of number theory. A primary goal of the proposed MSRI program is to explore the potential impact of geometric methods and ideas in the Langlands program by bringing together researchers working in the diverse areas impacted by the Langlands philosophy, with a particular emphasis on representation theory over local fields.

Information: <http://www.msri.org/web/msri/scientific/programs/show/-/event/Pm8951>.