
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/>.

February 2009

* 1–12 **IX Winter Russian Diffiety School — on Geometry of Partial Differential Equations and Secondary Calculus**, Sanatorij “Kostromskoj”, Kostroma, Russia.

Description: The aim of the permanent Diffiety School is to introduce undergraduate and Ph.D. students in mathematics and physics as well as post-doctoral researchers in a recently emerged area of mathematics and theoretical physics: Secondary Calculus. A diffiety is a new geometrical object that properly formalizes the concept of the solution space of a given system of (nonlinear) PDEs, much as an algebraic variety does with respect to solutions of a given system of algebraic equations. Secondary calculus is a natural diffiety analogue of the standard calculus on smooth manifolds, and as such leads to a very rich general theory of nonlinear PDEs. It appears that it is this the only natural language of quantum physics, just as the standard calculus is for classical physics.

Information: <http://school.diffiety.org/page3/page0/page92/page92.html>.

March 2009

* 2–6 **SIAM Conference on Computational Science and Engineering (CSE09)**, Miami Hilton Downtown, Miami, Florida.

Description: Computational Science and Engineering (CS&E) is now widely accepted, along with theory and experiment, as a crucial third mode of scientific investigation and engineering design. Aerospace, automotive, biological, chemical, semiconductor, and other industrial sectors now rely on simulation for technical decision support. For government agencies also, CS&E has become an essential support for decisions on resources, transportation, and defense. Finally, in many new areas such as medicine, the life sciences, management

and marketing (e.g., data- and stream-mining), and finance techniques and algorithms from CS&E are of growing importance.

Information: For more information, see: <http://www.siam.org/meetings/cse09/>.

* 6–8 **2nd Bluegrass Algebra Conference**, University of Kentucky, Lexington, Kentucky.

Description: The conference continues a well established tradition of Commutative Algebra and Algebraic Geometry meetings in the Midwest, among which we single out MAGC97 at the University of Notre Dame in 1997, BACH’2 at the University of Kentucky in 2003, the Lipman-Fest at Purdue University in 2004, MAGIC’05 at the University of Notre Dame in 2005, the Purdue-UIC Workshop at Purdue University in 2006, and the Hartshorne’s 70th birthday conference at the University of Illinois at Chicago in 2008. In order to enhance the visibility of mathematics among the diverse population of the University of Kentucky students, the conference will be preceded by a lecture aimed at the undergraduate level. The lecture will be delivered by Professor David Cox (Amherst College).

Speakers: David Cox, Amherst College, Lawrence Ein, University of Illinois at Chicago, Steven Kleiman, Massachusetts Institute of Technology, Andrew Kustin, University of South Carolina, Sonja Petrovic, University of Illinois at Chicago, Paul Roberts, University of Utah, Maria Evelina Rossi, Università di Genova (Italy), Hal Schenck, University of Illinois at Urbana-Champaign, Javid Validashti, University of Kansas.

Support: Mathematicians at the peridocloral stage (meaning those who are close to finishing the doctorate or have recently finished) that attend the conference will be supported through funds made available by the National Science Foundation via the Special Algebra Meetings in the Midwest grant (NSF DMS-0753127). They are encouraged to apply at the conference Website by January 31, 2009.

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.ms.uky.edu/~algebra_uky_09.

* 7-11 **The Spring Topology and Dynamics Conference and the Ulam Centennial Conference**, University of Florida, Gainesville, Florida.

Description: The Spring Topology and Dynamics Conference is in its 41st year and each year brings together researchers from diverse areas of topology and dynamics. Stanislaw Ulam, one of the preeminent mathematical scientists of the 20th century, was a graduate research professor at the University of Florida and will turn 100 in spring, 2009. In light of Ulam's many contributions to topology, dynamics, and related fields, we are joining the annual STDC with an Ulam Centennial.

Information: <http://www.math.ufl.edu/stdculam/>.

* 15-21 **Spring School on Index Theory, Lie Groupoids and Boundary Value Problems**, University of Regensburg, Germany.

Topics: Index theory for foliations. Around ellipticity of boundary conditions. From analysis on non-compact manifolds to boundary value problems on polyhedral domains. Index theory, bordism and rho-invariants. Index theory and positive scalar curvature.

Organizers: Bernd Ammann and Ulrich Bunke.

Speakers: Moulay-Tahar Benameur, Metz, France; Gilles Carron, Nantes, France; Victor Nistor, Penn State Univ., USA; Paolo Piazza, Rome, Italy; Thomas Schick, Goettingen, Germany.

Register: Please register as soon as possible by sending an email to us. We have reserved a number of hotel rooms for participants of the spring school. However, on December 15th, 2008, we either have to cancel the reservation or make the reservation legally binding. There is a small budget to support participants of the spring school. Please contact us until Dec. 12th, 2008, in case you want to apply for support for travel or accommodation; Bernd Ammann, Ulrich Bunke.

Information: <http://www.mathematik.uni-regensburg.de/ammann/springschool/>.

* 20-22 **Southern Regional Algebra Conference 2009**, University of South Alabama, Mobile, Alabama.

Description: The Southern Regional Algebra Conference 2009 will take place at the University of South Alabama in Mobile. All participants are invited to present 25-minute talks. The first talks will be scheduled for Friday afternoon, beginning approximately at 1:30 PM. The conference will end by noon on Sunday. As usual, no financial support will be provided for the participants by the University of South Alabama. Graduate students are strongly encouraged to participate.

Organizers: Jörg Feldvoss, Cornelius Pillen, Yorck Sommerhäuser.

Information: http://www.southalabama.edu/mathstat/personal_pages/pillen/conference.html.

* 20-23 **Cincinnati Symposium on Probability Theory and Applications 2009**, University of Cincinnati, Cincinnati, Ohio.

Description: The meeting will start on Friday at 3 pm with a Taft lecture by professor S.R.S. Varadhan on large deviations in a random environment. Other lectures will cover new advances in studying the structure of a stochastic process via a martingale approximation; connections to ergodic theory; limit theorems and applications in statistics, finance, and statistical inference for random processes which may exhibit strong or long-range dependence, nonlinearity, heavy tails and other features; large-dimensional random matrices. A unique feature of our symposium is a series of four talks by experts on forensic genomics, which will take place on Saturday, March 21, 2 pm-6 pm.

Information: <http://math.uc.edu/free-gauss/CSP.htm>.

* 27 **Illinois/Missouri Applied Harmonic Analysis Seminar**, University of Illinois, Urbana, Illinois.

Description: This half-day meeting fosters research interactions among mathematicians, engineers, and physicists who develop and apply techniques from harmonic analysis.

Theoretical topics of interest: Fourier analysis, wavelets, Gabor systems (time-frequency analysis), frames, Riesz bases, compressed sensing, approximation theory, X-ray type transforms.

Applications of interest: All kinds of signal and image analysis, processing and reconstruction, both analogue and digital.

Speakers: John J. Benedetto, Gitta Kutyniok, and Emmanuel Candes.

Support: This conference is supported in part by the Institute for Mathematics and its Application (IMA) through its Participating Institution (PI) Program. PI members may use IMA/PI funds to support travel of their personnel to this conference. All interested researchers

are welcome. There is no registration fee. Travel funding is available for participants based in the U.S.

Information: <http://www.math.uiuc.edu/~laugesen/imaha05/imaha05.html>.

April 2009

* 17-18 **2009 Barrett Lectures**, University of Tennessee, Knoxville, Tennessee.

Description: The scientific program of the meeting will cover a selection of applications of stochastic analysis. Professor Richard Bass proposes to lecture on potential theory and integro-differential equations while Professor Ofer Zeitouni intends to speak on problems in the study of random walks in random media. The one-hour invited speakers have not yet specified their talks but are expected to speak on filtering, partial differential equations driven by Levy processes, random polynomials, and other topics related to stochastic analysis and its applications.

Topics: Stochastic Analysis and its Applications.

Main Speakers (three lectures each): Richard Bass, University of Connecticut; Ofer Zeitouni, University of Minnesota and Weizmann Institute.

Invited Speakers (one lecture each): Amarjit Budhiraja, University of North Carolina; Dan Crisan, Imperial College; Christian Houdre, Georgia Tech; Davar Khoshnevisan, University of Utah; Wembo Li, University of Delaware.

Talks: There will be eight contributed talks (15 minutes each). If you would like to give a talk, please send the title and abstract to: jxiong@math.utk.edu by February 28, 2009. We will choose eight contributing speakers from the abstracts received.

Organizers: X. Chen, B. Rajput, J. Rosinski, J. Xiong.

Sponsor: The 2009 Barrett Lectures is sponsored by the National Science Foundation, the Department of Mathematics, and the University of Tennessee.

Information/Registration/Funding: Will be available for the partial support of participants. Graduate students and young researchers are particularly invited to apply for support. On-line registration will be available starting in February. You can also register by sending an email to: jxiong@math.utk.edu.

* 19-25 **Spring School on Variational Analysis and its Applications**, Paseky nad Jizerou, Czech Republic.

Main speakers: F. Bonnans, A. Daniilidis, A. L. Dontchev, A. Ioffe.

Organizing committee: Marian Fabian, Jaroslav Lukes, Jiri Outrata (Czech Republic).

Language: English.

Grants: Probably support for a limited number of students.

Deadlines: For reduced fee and support: January 15, 2009.

Information: <http://www.karlin.mff.cuni.cz/katedry/kma/ss/apr09/>; email: paseky@karlin.mff.cuni.cz.

* 23-25 **Twelfth New Mexico Analysis Seminar**, University of New Mexico, Albuquerque, New Mexico.

Goal: The goal of the conference is to provide an opportunity for scientific exchange and cooperation among broadly defined analysts. There is time allocated for shorter contributed talks. Priority will be given to graduate and postdoctoral students and those in early stages of their careers.

Organizers: Cristina Pereyra, email: crisp@math.unm.edu; Tiziana Giorgi, email: tgiorgi@nmsu.edu; Joseph Lakey, email: jlakey@nmsu.edu; Adam Sikora, email: asikora@nmsu.edu; Robert Smits, email: rsmits@nmsu.edu. This seminar is organized every year by analysts at New Mexico State University and The University of New Mexico.

Keynote Speaker: Loukas Grafakos, University of Missouri at Columbia: Lectures on "Linear and Multilinear Singular Integral Operators".

Invited Speakers: Arpad Benyi (Western Washington University), and Diego Maldonado (Kansas State University).

Sponsor: NSF.

Information: <http://www.math.unm.edu/conferences/12thAnalysis>.

May 2009

- * 25–29 **Indam School on symmetry for elliptic PDEs (30 years after a conjecture of De Giorgi and related problems)**, Istituto Nazionale di Alta Matematica, Università di Roma La Sapienza, Rome, Italy.
Description: The school is open to graduate students and young researchers. The courses will be offered by Professors Xavier Cabré, Manuel del Pino, Ermanno Lanconelli and Ovidiu Savin. A few seminars will be also presented. The school is organized by Alberto Farina and Enrico Valdinoci.
Information: <http://www.mat.uniroma2.it/~valdinoc/scuola-indam.html>.
- * 31–June 6 **Spring School on Analysis: Function Spaces, Inequalities and Interpolation**, Paseky nad Jizerou, Czech Republic.
Main speakers: Anders Björn, Fernando Cobos, Thierry Coulhon, Peter A. Hästö.
Language: English.
Information: <http://www.karlin.mff.cuni.cz/katedry/kma/ss/jun09/>.

June 2009

- * 1–5 **Fifth Summer School in Analysis and Applied Mathematics**, Department of Mathematics, Sapienza, Università di Roma, Rome, Italy.
Description: The school is intended mainly for Ph.D. students and young researchers in analysis and applied mathematics.
Aim: The aim of the school is to provide a smooth trip in two important areas of the Calculus of Variations: Minimal Surfaces and Differential Inclusions. G. Alberti will guide the audience to a quick but detailed introduction to the most important prerequisites.
Speakers: The three speakers will be G. Alberti, S. Hildebrandt, and L. Székelyhidi Jr.
Information: <http://www.mat.uniroma1.it/people/garroni/School2009.html>.
- * 8–11 **The 2nd International Conference on Mathematical Modelling and Computation and The 5th East Asia SIAM Conference**, Universiti Brunei Darussalam, Bandar Seri Begawan, Brunei.
Description: The conference shall provide a venue to exchange ideas in the mathematical modelling of biological and physical systems, financial mathematics, and areas such as integral and differential operators and numerical methods, in promoting both established and newer national and international research relationships.
Information: <http://mmc09.ubd.edu.bn/>.
- * 15–July 3 **Summer School and Conference in Geometric Representation Theory and Extended Affine Lie Algebras**, University of Ottawa, Ottawa, Ontario, Canada.
Description: The summer school will consist of three mini-courses per week for two weeks. These courses will serve as an introduction to geometric representation theory, quantum groups and combinatorial representation theory (i.e., the theory of crystal bases), the structure theory of extended affine Lie algebras and the representation theory of affine and toroidal Lie algebras. They will be aimed at the graduate student/postdoctoral fellow level. Following the summer school there will be a one-week conference featuring speakers presenting recent developments in areas related to the material of the summer school. The event is sponsored by the Fields Institute (Toronto).
Information: <http://www.fields.utoronto.ca/programs/scientific/08-09/geomrep/>.
- * 16–22 **Sixth International Workshop on Optimal Codes and Related Topics: OC 2009**, Varna, Bulgaria.
Description: This workshop gathers researchers on optimal linear codes and related problems.
Topics include: Optimal linear codes over finite fields and rings, bounds for codes, spherical codes and designs, covering problems for linear and nonlinear codes, optimization problems for nonlinear codes, sets of points in finite geometries, combinatorial configurations and codes, optimality problems in cryptography, graph theory and codes, and related topics.
Information: <http://www.moi.math.bas.bg/oc2009/oc2009.html>.
- * 22–27 **3rd Nordic EWM Summer School for Ph.D. Students in Mathematics**, University of Turku, Turku, Finland.
Description: Ph.D. students in pure mathematics, applied mathematics, mathematical statistics, mathematics education, or history of mathematics from the Nordic countries are invited to participate in a summer school in mathematics organized by the European Women in Mathematics (EWM). The summer school is especially aimed at encouraging female students and researchers in their early careers, but we also warmly welcome male students. Students outside the Nordic countries, post-docs or advanced undergraduates thinking of Ph.D. studies are also invited to attend. The program of the meeting is broad and will be of interest for students working in different research areas. Mini-courses will give an introduction and an overview over three chosen topics of general interest from different areas of mathematics. They will be aimed at all students with a general mathematical background, yet come to touch questions of current research.
Information: <http://www.math.utu.fi/projects/ewm>.
- * 22–27 **First Conference “Application of Mathematics in Technical and Natural Sciences” (AMiTANS’09)**, Resort of Sozopol, Bulgaria.
Description: Papers on all subjects of application of mathematics in mechanics, physics, biology, chemistry and different engineering fields are invited. We plan to have several special sessions. The conference will consist of a few plenary talks by invitation from the Program Committee, 60 minutes each. In each special session there will be a couple of key lectures 45 minutes each. The invited presentations in the special sessions will be 30 minutes long. All contributed talks will be 20 minutes long. If necessary, parallel sessions will be organized.
Information: <http://www.eac4amitans.org>.
- * 22–July 3 **Automorphic forms and L-functions, computational aspects**, CRM, Montreal, Canada.
Description: The purpose of the school is to bring together a number of experts who have been leaders in both the theoretical and more computational aspects of the theory of automorphic forms and L-functions, who will offer introductory-level courses aimed at presenting graduate students and post-doctoral fellows with the state of the art in the subject and report on new advances which have not yet been covered in a forum of this sort.
Information: http://www.dms.umontreal.ca/~sms/index_e.shtml.
- * 25–27 **Current Geometry: The X Edition of the International Conference on Problems and Trends of Contemporary Geometry**, Palazzo Serra di Cassano, Via Monte di Dio, 80132 Naples, Italy.
Description: The power of synthesis of geometry, which led in the past to the formulation of “grand unification theories”, has got an essential role nowadays, especially because of the growing fragmentation of knowledge due to scientific progress. In order to avoid a big dispersion, geometers need a constant dialogue. Therefore, a stable experience of personal meetings, apart from telematic interchanges, cannot be renounced. Current geometry was born to allow a periodic update about actual progresses in geometry (and its applications) on the international scene.
Information: <http://www.levi-civita.org/CG2009.html>.

July 2009

- * 6–10 **2009 SIAM Annual Meeting (AN09)**, Sheraton Denver Hotel, Denver, Colorado.
Description: SIAM’s Annual Meeting provides a broad view of the state of the art in applied mathematics, computational science, and their applications through invited presentation, prize lectures, mini-symposia, and contributed papers and posters.
Information: <http://www.siam.org/meetings/an09/>.
- * 16–31 **XII Diffiety School — on Geometry of Partial differential Equations and Secondary Calculus**, Santo Stefano del Sole, Avellino, Italy.
Description: The aim of this permanent school is to introduce undergraduate and Ph.D. students in mathematics and physics as well as post-doctoral researchers in a recently emerged area of mathematics and theoretical physics: Secondary Calculus. A diffiety is a new geometrical object that properly formalizes the concept of the solution space of a given system of (nonlinear) PDEs, much as an algebraic variety does with respect to solutions of a given system of algebraic equations. Secondary calculus is a natural diffiety analogue of the standard calculus on smooth manifolds, and as such leads to a very

rich general theory of nonlinear PDEs. It appears that it is the only natural language of quantum physics, just as the standard calculus is for classical physics.

Information: <http://school.diffiety.org/page3/page0/page93/page93.html>.

- * 31-August 2 **3rd Jairo Charris Seminar—Symmetries of differential and difference equations**, Universidad Sergio Arboleda, Bogotá, Colombia.

Description: The Jairo Charris Seminar is an annual event organized by the Sergio Arboleda University. It is dedicated to Jairo Antonio Charris Castañeda (1939-2003), who was one of the fathers of the Colombian mathematical research and former professor of our university.

Topics: Symmetries of differential and difference equations. Algebraic methods in differential and difference equations. Integrability, solvability and reducibility of differential and difference equations.

Information: http://www.usergioarboleda.edu.co/matematicas/jairo_charris.htm.

August 2009

- * 3-14 **Pan-American Advanced Studies Institute (PASI): In Commutative Algebra and its connections to Geometry**, Olinda, Brazil.

Description: The two week program is sponsored by a PASI grant from the Office of International Science & Engineering of the NSF. The program will consist of six mini-courses on fundamental techniques in commutative algebra and related fields during the first week (school). The second week will be devoted to a series of advanced research talks by recognized leaders in the area (international workshop). The courses will bring junior researchers up-to-speed in the more specialized topics that will be the focus of the advanced lectures and will contribute to the training of young researchers from the Americas.

Organizers: A. Corso, C. Huneke, C. Polini, A. Simis, and B. Ulrich.

School speakers: David Cox, Amherst College (USA), Juergen Herzog, University of Duisburg-Essen (Germany), Craig Huneke, University of Kansas (USA), Steven Kleiman, MIT (USA), Maria Evelina Rossi, Università di Genova (Italy), Bernd Ulrich, Purdue University (USA).

Support: Mathematicians from the Americas at the peridocctoral stage (meaning those who are close to finishing the doctorate or have recently finished) that attend the school will be supported through funds made available by the National Science Foundation via the PASI program. They are encouraged to apply at the conference web site by March 31, 2009.

Information: <http://www.ms.uky.edu/~pasi2009>.

- * 17-21 **International Conference on Complex Analysis and Related Topics**, University of Turku, Turku, Finland.

Description: This conference is the 12th one in the series of Romanian-Finnish Seminars on topics related to mathematical analysis. The conference is open to all nationalities.

Information: <http://www.math.utu.fi/romfin2009/>.

September 2009

- * 2-4 **Workshop in nonlinear elliptic PDEs**, Université Libre de Bruxelles, Brussels, Belgium.

Description: The workshop is organized on the occasion of the 65th birthday of Jean-Pierre Gossez.

Speakers: The following lecturers have confirmed their participation: Henri Berestycki (Paris), Philippe Clément (Delft), Djairo G. de Figueiredo (Campinas), François de Thélin (Toulouse), Pavel Drabek (Pilsen), Ivar Ekeland (Vancouver), Jesús Hernández (Madrid), Bernd Kawohl (Köln), Pierre-Louis Lions (Paris), Jean Mawhin (Louvain-la-Neuve), Petru Mironescu (Lyon), Mark Peletier (Eindhoven), Frédéric Robert (Nice), Bernhard Ruf (Milano), Michael Struwe (Zurich), Charles Stuart (Lausanne), Juan Luis Vazquez (Madrid).

Information: <http://wnpde09.ulb.ac.be/>.

October 2009

- * 9-11 **SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI09)**, Hilton San Francisco Financial District, San Francisco, California.

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 plan-

ning for these conferences, the major objective has been the development and encouragement of industrial, government, and academic collaboration. The format of this conference continues to provide a forum for industrial and government engineers and scientists to communicate their needs, objectives, and visions, to the broad mathematical community. In 2009 an all-electronic proceedings will be introduced providing a unique and convenient opportunity for the SIAM community to publish applications of and research in applied mathematics. The major themes continue to fit the important categories of Challenges, Frontiers, and Industrial Academic Collaborations.

Information: <http://www.siam.org/meetings/calendar.php>.

November 2009

- * 29-December 4 **Southern Right Delta ($\Sigma P\Delta'09$) Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics**, Gordon's Bay, Western Cape, South Africa.

Description: The seventh bi-annual Delta conference on the teaching and learning of undergraduate mathematics and statistics ($\Sigma P\Delta'09$) takes place in the picturesque beach town of Gordon's Bay, close to Cape Town, South Africa. $\Sigma P\Delta'09$ forms part of the series of Delta conferences, a southern hemisphere initiative.

Information: <http://www.delta2009.co.za/index.html>.

December 2009

- * 7-9 **SIAM Conference on Analysis of Partial Differential Equations (PD09)**, Hilton Miami Downtown, Miami, Florida.

Description: This conference is organized by the SIAM Activity Group (SIAG) on Analysis of Partial Differential Equations (SIAG/APDE).

Information: The website will be updated as additional information becomes available. <http://www.siam.org/meetings/calendar.php>.