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/.

January 2014

* 6–July 31 Research Programme on Central Configurations, Periodic Orbits and Beyond in Celestial Mechanics, Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain.
Description: The study of the dynamics of $n$ point masses interacting according to Newtonian gravity is usually called the $n$-body problem. It can be considered as old as the history of the science and has influenced most of the areas in mathematics. However, most of the problems in Celestial Mechanics are beyond the present limits of the knowledge and many natural questions are difficult or impossible to solve when the number of bodies $n$ is larger than 2. In order to make progress against such complexity one must look for specific objects. From a geometrical point of view a key point consists in trying to understand the structure of the phase space looking for the equilibrium points, periodic orbits, invariant tori, etc. The stable and unstable manifolds associated to these objects form a kind of network of connections, which together with the previous invariant objects constitute a big part of the main skeleton of the system.

* 7–10 Variational Methods in Elliptic Equations and Systems, University of Lisbon, Lisbon, Portugal.
Description: Variational Methods have proven to be a powerful way to solve many problems in the field of differential equations. This scientific meeting will focus mainly on their use in the study of elliptic equations and systems, and will bring together several experts on the field. Participants are encouraged to submit an abstract. The event, which is dedicated to the memory of Miguel Ramos, will take place at the University of Lisbon, Portugal.

* 20–24 Holomorphic and Symbolic Dynamics, Université Paul Sabatier, Toulouse, France.
Focus: The focus is on holomorphic and symbolic dynamics, and their relation to group theory. The purpose is to encourage contact and collaboration between these related fields; in particular, viewing holomorphic dynamical systems as topological objects; encoding their attractors via symbolic dynamics; describing the parameter spaces of such dynamical systems topologically and combinatorially; and using monodromy representations to tie these concepts together and with group theory.
Information: http://sites.google.com/site/hsdynamics2014/.

* 27–31 Central Configurations, Periodic Orbits and Beyond in Celestial Mechanics (DANCE Winter School), Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain.
Description: The advanced course on Central Configurations, Periodic Orbits and Beyond in Celestial Mechanics is a joint activity of the DANCE Spanish network with the CRM in the framework of the research programme Central Configurations, Periodic Orbits and Beyond. It is the 11th winter school in Dynamical Systems of the DANCE network. This series of winter schools aims at training their participants both theoretically and in applications in the field of nonlinear science; with the aim that theory and applications enforce each other. This will be done in an atmosphere of informal discussion, interchange of ideas and critical discussion of results. Attention

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/.
will be paid to the numerical and computational issues. These winter schools should help the basic training of young researchers, whilst opening new fields for senior ones. As a byproduct, the courses are planned to receive official recognition in some doctorate programs.

**Information:** http://www.crm.cat/2014/ACDance.

**February 2014**

* 26–27 7th Seminar on Linear Algebra and its Applications, Ferdowsi University, Mashhad, Iran.

**Description:** The seminar will provide a forum for mathematicians worldwide and graduate students to present their latest results about all aspects of linear algebra and a means to discuss their recent researches with each other. The language of the presentation may be English or Farsi. For participating in the conference, the non-Iranian mathematicians may contact the chairman Professor M. S. Moslehian.

**Information:** http://profsite.um.ac.ir/~math/slaa7.htm.

**March 2014**

* 12–21 School ”Around Vortices: from Continuum to Quantum Mechanics”, IMPA, Rio de Janeiro, Brazil.

**Description:** A school on the topic of vortices in fluids, from classical Newtonian fluids, to complex fluids, to superfluids, and in superconductors. Opening event for the Thematic Program on Incompressible Fluid Dynamics at IMPA.

**Information:** http://www.impa.br/opencms/pt/eventos/store/evento_1402.

**April 2014**

* 25–27 The Riviere-Fabes Symposium on Analysis and PDE, University of Minnesota, Minneapolis, Minnesota.

**Description:** A three-day symposium in Analysis and PDE, with two hours of talks by each of the following four speakers: Sun-Yung Alice Chang (Princeton), Alexandru Ionescu (Princeton), Frank Merle (Université de Cergy-Pontoise and IHES), Maciej Zworski (Berkeley).

**Information:** http://www.math.umn.edu/conferences/riv_fabes/.

**May 2014**

* 9–17 Master-class: Around Thurston-Grothendieck-Teichmüller Theories, University of Strasbourg, Strasbourg, France.

**Description:** The master-class is oriented to graduate and Ph.D. students and post-docs. Confirmed researchers are also welcome. The aim of this master class is to give an introduction to hyperbolic geometry, Riemann surfaces and Teichmüller spaces as these appear in the works of Thurston, Grothendieck and Teichmüller, and to show the connections between the various theories. There will also be a course on the dynamical/probabilistic aspects of hyperbolic geometry. Seven 5-hour courses will be given by: Norbert A’Campo (Basel), Louis Funar (Grenoble), Jacques Franchi (Strasbourg), Hugo Parlier (Grenoble), Gabriela Schmithüsen (Karlsruhe), Muhammed Uludag (Istanbul) and Alexandre Zvonkine (Bordeaux). There will be some additional research lectures. Limited funding for local expenses is available. Graduate and Ph.D. students are welcome. For questions and registration contact the organizer, A. Papadopoulos, papadop@math.unistra.fr.

**Information:** http://www-irma.u-strasbg.fr/article1389.html.


**Description:** The theory of polynomials over finite fields is fundamental for the study of finite fields, which in turn plays a central role in many areas of pure and applied mathematics. This is a classical area of mathematics with a rich history, going back to Gauss and Galois. The exciting and challenging problems concerning univariate and multivariate polynomials over finite fields are of intricate algebraic and number theoretic flavour and their study requires deep mathematical and computational tools. The determination and construction of special types of (irreducible, primitive, permutation) univariate and multivariate polynomials, for example, as well as understanding many of their functional and algebraic properties (composition, decomposition, iteration, factorization, size of value sets) are long standing problems in the theory of finite fields. These areas have attracted further attention in recent years due to their applications in cryptography, coding theory, combinatorics, design theory, quasi-Monte Carlo methods, communications.

**Information:** http://www.crm.cat/2014/WKFiniteFields.

* 20–23 XXI International Seminar NONLINEAR PHENOMENA IN COMPLEX SYSTEMS (Chaos, Fractals, Phase Transitions, Self-organization), Joint Institute for Power and Nuclear Research: “Sosny”, Minsk, Belarus, Russia.

**Objective:** There will be discussed some modern advances, approaches and tools for studying nonlinear problems in different fields of science (mathematics, physics, chemistry, biology, economics and others).

**Subjects:** Above-mentioned and other frontier topics in modern nonlinear study in mathematical foundations and methods (dynamical systems, analytical and numerical methods, number theory and cryptography); Information processing (quantum computation, neural networks, artificial intelligence, parallel computing, GRID); High energy physics (QCD, standard model, quark-gluon plasma, collective phenomena, nonperturbative effects, confinement); Nuclear and reactor physics (development and adaptation of codes for deterministic/probabilistic safety analysis); Foundation of electronics and optics (classical and quantum optics); Social and biological systems (nonlinear dynamics in economics, social and biological systems).

**Deadline:** For applications: April 1, 2014.

**Information:** http://npics-j-npcs.org/.

* 20–24 7th Conference on Function Spaces, Southern Illinois University, Edwardsville, Illinois.

**Description:** The conference will provide a forum for mathematicians interested in Function Algebras, Banach Algebras, Spaces & Algebras of Analytic Functions, LP Spaces, Geometry of Banach Spaces, Isometries of Function Spaces, and related problems.

**Support:** We applied for an NSF for a grant to help the participants with the local and travel cost and the registration fee; priority will be given to young mathematicians (including graduate students) without any other source of support.

**Information:** http://www.siue.edu/MATH/conference2014/.

* 29–31 Computational Management Science 2014 - CMS 2014, Faculty of Sciences, University of Lisbon, Lisbon, Portugal.

**Description:** We are pleased to announce the 11th International Conference on Computational Management Science (CMS) to be held in Lisbon, Portugal, in May of 2014. With its unique mixture of cultural and social activities, Lisbon will undoubtedly provide the perfect discussion forum for academia and industry to exchange knowledge, ideas and results. The topics for discussion span over a wide range of areas relevant to the theory and practice of computational methods, models and empirical analysis for decision-making, with special emphasis this year on Energy and Finance. We hope you accept this invitation to embark with us on a journey of discovery in the computational side of management science in the city that spawned many other journeys of discovery—Lisbon!


**June 2014**

Description: Computer graphics and visualization, computer vision, image processing and pattern recognition, fundamental algorithms, GPU graphics, graphical human computer interfaces, geometric modeling, computer aided geometric design, computational geometry, rendering and virtual reality, animation and multimedia, medical imaging, graphical interaction, object oriented graphics, parallel and distributed graphics, CAD and GIS systems, geometrical algebra and related topics.

Information: http://www.wscg.eu.

* 2–6 Conference on Ulam’s type stability, Rytro, Poland.

** Description: The conference is organized by the Department of Mathematics of the Pedagogical University in Cracow, and is devoted to various investigations motivated by the notion of Hyers-Ulam stability and related issues. The participants are invited to give talks on stability of difference, differential, functional, and integral equations; stability of inequalities and other mathematical objects; hyperstability and superstability; various (direct, fixed point, invariant mean, etc.) methods for proving Ulam’s type stability results; generalized (in the sense of Aoki and Rassias, Bourgin and Găvruta; stability; stability on restricted domains and in various (metric, Banach, non-Archimedean, fuzzy, quasi-Banach, etc.) spaces; relations between Ulam’s stability and fixed point results. Moreover, some lectures on other related topics will be provided. This time, a special session on dynamical systems is planned.

Information: http://cuts.up.krakow.pl.

* 2–6 Hamiltonian Systems and Celestial Mechanics (HAMSYS 2014), Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain.

** Description: In 1991 started the series of the HAMSYS Symposia. These symposia brought together top researches from several countries, working mainly in Hamiltonian Systems and Celestial Mechanics, as well as many graduate students who had the opportunity to learn from and connect with the experts in the field. The VII-th HAMSYS Symposium, denoted HAMSYS-2014, will take place at the CRM (Centre de Recerca Matemàtica, at the Universitat Autònoma de Barcelona). The emphasis of the talks will be on Hamiltonian dynamics and its relationship to several aspects of mechanics, geometric mechanics, and dynamical systems in general. The HAMSYS-2014 will be dedicated to the 70th birthday of Professor Clark Robinson.


** Description: A Number Theory Conference in memory of Paul and Felice Bateman will be held at the University of Illinois. The Batemans were long-time members of the faculty and Paul was department head for 14 years. Paul was a member of the American Mathematical Society for 71 years and among his other services, was a Trustee of the AMS. This meeting continues a long tradition of number theory conferences at Illinois.

Invited talks: There will be twenty invited talks as well as opportunities for contributed talks. These will cover a broad spectrum of number theory, representing Paul’s many interests. A banquet will be held on June 6. There will be a refereed proceedings volume of conference talks. The conference will be preceded by the Midwest Number Theory Conference for Graduate Students, June 3–4, 2014 (which is being announced separately).


* 9–14 Representations, Dynamics, Combinatorics: In the Limit and Beyond, A conference in honor of Anatoly Vershik’s 80th birthday, Saint-Petersburg, Russia.

** Description: The conference will focus on the areas of mathematics where Anatoly Vershik has made important contributions, including representation theory, dynamical systems, ergodic theory, asymptotic combinatorics, operator algebras, and measure theory. It will feature invited talks by leading experts in these fields.


* 17–20 First International Congress on Actuarial Science and Quantitative Finance, Universidad Nacional de Colombia, Bogota, Colombia.

** Description: The event would consist of plenary sessions of invited speakers, oral sessions of contributed talks, poster sessions and short courses in topics of interest in actuarial science and quantitative finance, given by some of the invited speakers.

Invited speakers: Hansjoerg Albrecher, Université de Lausanne; Richard Davis, Columbia University; Monique Jeanblanc, Université d’Evry Val-d’Essonne; Steve Haberman, City University London; David Ingram, Willis Re; Stéphane Loisel, Université Claude Bernard Lyon 1; Fabio Mercurio, Blomberg; Ajay Subramanian, Georgia State University; Carlos Vázquez Cendón, Universidad de la Coruña; Shaun Wang, Georgia State University.

Organizer: Universidad Nacional de Colombia.

Information: http://www.matematicas.unal.edu.co/icasqf/.

* 30–July 5 25th International Conference in Operator Theory, West University of Timisoara, Timisoara, Romania.

** Description: The conference is devoted to operator theory, operator algebras and their applications (differential operators, complex functions, mathematical physics, matrix analysis, system theory, etc.).


July 2014


** Description: The conference ICAEM’14 is held under the World Congress on Engineering 2014. The WCE 2014 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 proceedings (ISBN: 978-988-19252-7-5). The abstracts will be indexed and available at major academic databases. The accepted papers will also be considered for publication in the special issues of the journal Engineering Letters, in IAENG journals and in edited books.


August 2014

* 3–9 XIX EBT - 19th Brazilian Topology Meeting, State University of São Paulo (UNESP), São José do Rio Preto, Brazil.

** Description: The 19th Brazilian Topology Meeting will take place at the State University of São Paulo (UNESP), São José do Rio Preto, in the state of São Paulo, Brazil, from Sunday August 3, 2014 until August 9, 2014.

Scientific Committee: Daciberg Lima Gonçalves (Coordinator), Marek Golasiński, John Guaschi, Claude Hayat, Eduardo Hoefel and Pedro Pergher.

Organizing committee: Ermínia de Louves Campello Fanti (Coordinator), Alice Kimie Miwa Libardi, Darlan Rabelo Girão, Denise de Mattos, Evelin Meneguesso Barbaresco, Flávia Souza Machado da Silva, João Carlos Ferreira Costa, Leonardo Navarro de Carvalho, Lígia Lais Fémina, Luciana de Fátima Maetins, Lucilia Daruiz Borsari, Luiz Roberto Hartmann Junior, Maria Gorete Carreira Andrade, Michelle Ferreira Zanchetta Morgao and Thiago de Melo. Further details will be posted on the website as they become available.

Contact: Ermínia de Louves Campello Fanti, email: ebt2014@ibilce.unesp.br.

Recent Developments in Adaptive Methods for PDEs, Collaborative Workshop and Short Course, Memorial University of Newfoundland, St. John’s, Newfoundland, Canada.

**Description:** The aim of this workshop is to provide an introduction to the state of the art in theory and practical applications of adaptivity in PDEs. The program will begin with a two-day short course, “Adaptive Methods for the Numerical Solution of PDEs”, given by Dr. Weizhang Huang (University of Kansas). The middle component of the program will focus on presentations by researchers whose work may benefit from the use of adaptive techniques for PDEs arising as mathematical models in practical applications. The final segment of the program will feature a workshop format in which breakout teams, consisting of graduate students and postdoctoral fellows led by experts on theoretical or computational aspects of adaptive methods for PDEs, will investigate the process of introducing adaptive techniques into the numerical simulations that arise in the applications identified earlier. The segment will also include several talks by researchers working in adaptivity for PDEs.

**Information:** [http://www.math.mun.ca/anasc](http://www.math.mun.ca/anasc)

**September 2014**


**Description:** The aim of the conference is to bring together researchers, scientists, engineers, and students to exchange and share their experiences, new ideas, and research results about modeling, analysis and simulation of flow and transport in porous media and application to problems including subsurface hydrology, petroleum exploration, contaminant remediation, carbon sequestration and nuclear waste storage.

**Information:** [http://http://www.caas.unizg.hr; http://nm2porousmedia.math.pmf.unizg.hr/index.html](http://www.caas.unizg.hr; http://nm2porousmedia.math.pmf.unizg.hr/index.html)

- **5–11 International Conference on Algebraic Methods in Dynamical Systems (Conference in honour of the 60th birthday of Juan J. Morales-Ruiz),** Universidad del Norte, Barranquilla, Colombia.


**Scientific committee:** Jean-Pierre Ramis, President (Université Paul Sabatier, France), José Manuel Aroca (Universidad de Valladolid, Spain), Andrzej Maciejewski (University of Zielona Gora, Poland), Hiroshi Umemura (Nagoya University, Japan), and Alexander Veselov (Loughborough University, United Kingdom).

**Organizing committee:** Primitivo Acosta-Humánez (Universidad del Norte, Colombia), David Blázquez-Sanz (Universidad Nacional de Colombia, secional Medellín), Camilo Sanabria (Universidad de los Andes, Colombia), and Sergi Simón (University of Portsmouth, United Kingdom).