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/ .

May 2012

* 4–6 **Chico Topology Conference**, California State University, Chico, California.
Invited Speakers include: Chris Herald (UN, Reno), Sergio Macias (UNAM, Mexico), Van Nall (University of Richmond), and Janusz Prajs (CSU, Sacramento). Researchers at all levels are invited to present 30-minute contributed talks in any area of topology. To apply, please send a title and abstract to Thomas Mattman (TMattman@CSUChico.edu) by April 1, 2012.
Information: http://www.csuchico.edu/~tmattman/CTC.html.

* 4–7 **50th Cornell Topology Festival**, Cornell University, Ithaca, New York.
Description: The program will feature talks by: Francis Bonahon, University of Southern California; David Gabai, Princeton University; Allen Hatcher, Cornell University; Peter May, University of Chicago; Dusa McDuff, Barnard College/Columbia University; John Milnor, Stony Brook University; Jacob Lurie, Harvard University; Tom Mrowka, Massachusetts Institute of Technology; Walter Neumann, Columbia University; Hee Oh, Brown University; John Pardon, Stanford Ronald Stern, University of California at Irvine; Peter Teichner, University of California at Berkeley; William Thurston, Cornell University.
Information: http://www.math.cornell.edu/~festival/.

* 10–12 **Young Women in PDEs**, Department of Applied Mathematics, University of Bonn, Bonn, Germany.
Description: This workshop is addressed to young female researchers in PDEs, the Calculus of Variations, and their applications. The aim of the conference is to provide a platform for scientific discussion and exchange of ideas, and to promote equal opportunity of women in the mathematical sciences.
Senior speakers: A. Garroni, University of Rome "La Sapienza", Italy; N. Uraltseva, St. Petersburg State University, Russia; M. Westdickenberg, RWTH Aachen, Germany. Ph.D. students and postdocs are invited to submit an abstract for a contributed talk by March 15th.
Organizing Commitee: L. Beck, C. Geldhauser, C. Zeppieri.
Information: http://www.iam.uni-bonn.de/ywipde.

* 12 **ECCAD 2012: East Coast Computer Algebra Day**, Oakland University, Rochester, Michigan.
Description: The East Coast Computer Algebra Day (ECCAD) is a one-day meeting for those interested in computer algebra and symbolic mathematical computation. It provides opportunities to learn and to share new results and current work in progress. The schedule includes prominent invited speakers along with contributed posters and software demonstrations. Plenty of time is allowed for unstructured interaction among the participants. Researchers, teachers, students, and users of computer algebra are all welcome!
Information: http://www.oakland.edu/math/eccad2012.

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/.

* 23–25 **Workshop on Semigroups 2012**, Caul, Lisbon, Portugal.
Description: The Workshop on Semigroups 2012 will be a special meeting to remember Professor John M. Howie.
Main Speakers: John Fountain, Univ. York, UK; Victoria Gould, Univ. York, UK; Peter M. Higgins, Univ. Essex, UK; Donald B. McAlister, Northern Illinois Univ., USA; Jean-Éric Pin, Univ. Paris 7, France; Jim Renshaw, Univ. Southampton, UK; Nik Ruskuc, Univ. St. Andrews, UK; Mária B. Szendrei, Univ. Szeged, Hungary.
Organizers: Gracinda M.S. Gomes, CAUL/FCTUNL, Portugal; Vítor H. Fernandes, CAUL/FCUL, Portugal.
Information: http://caul.cii.fc.ul.pt/WS2012/.

* 23–27 **History of Mathematics and Teaching of Mathematics Conference**, University of Miskolc, Sarospatak, Hungary.
Description: You and your colleagues are invited to participate in our conference.
Information: For more information please visit the web site: http://www.uni-miskolc.hu/hmtm.

* 30–June 2 **Workshop for Women in Analysis and PDE**, The Institute for Mathematics and its Applications (IMA), Minneapolis, Minnesota.
Description: The workshop will concentrate on central developments of modern Harmonic Analysis and Elliptic PDEs. It will introduce the participants to the methods and techniques which have emerged in recent years and outline important open problems, current progress, and main challenges. Some of the focal points include: the theory of weights, dyadic harmonic analysis, singular integral operators, Haar shifts and Bellman function, Carlson measures and their role in analysis and PDEs, elliptic PDEs on non-smooth domains, multilinear Fourier analysis, as well as connections to geometric measure theory, additive combinatorics, analytic number theory, several complex variables.
Information: http://www.ima.umn.edu/2011-2012/SW5.3-0-6.2.12.

June 2012

* 1–July 31 **Geometric and Analytic Techniques in Calculus of Variations and Partial Differential Equations**, Centro di Ricerca Matematica "Ennio De Giorgi", Piazza dei Cavalieri 3, 56100 Pisa, Italy.
Description: The intensive period will concentrate upon four topics. Each week of June will be devoted to one topic, with mini-courses and invited seminars at a doctoral/post-doctoral level. Seminars at a more specialized level will be organized in July. The weekly courses in June will be given by Dorin Bucur, Bernd Kawhol, Michel Pierre, Tadeusz Iwaniec, Pekka Koskela, Jan Maly, Xavier Cabre, Camillo De Lellis, Julio Rossi, Jean Dolbeaut, Giuseppe Mingione and Panagiota Daskalopoulos. Three workshops will be organized in July by Juan Luis Vazquez, Aldo Pratelli and Nicola Fusco, Antoine Henrot. A detailed scheme about planned activities is available at http://crm.sns.it/event/233/activities.html#title.
Financial support (board and lodging): For young participants will be provided upon selection.
Deadline: For applications for financial support is March 15th, 2012. For detailed information about the application procedure please link to http://crm.sns.it/event/233/financial.html.
Information: http://www.crm.sns.it/event/233/index.html#title.

* 4–8 **AIM Workshop: Cohomology bounds and growth rates**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will be devoted to questions associated to the following 1984 conjecture of Guralnick's: There exists a "universal constant" C which bounds 1-cohomology.
Information: http://www.aimath.org/ARCC/workshops/cohombounds.html.

* 6–8 **Joint Conference of the Belgian, Royal Spanish, and Luxembourg Mathematical Societies**, University of Liege, Belgium.
Description: This Joint meeting of the Belgian, Royal Spanish, and Luxembourg mathematical societies will gather mathematicians around 7 plenary speakers (http://nalag.cs.kuleuven.be/research/workshops/BSL2012/plenary.shtml) and in 8 special sessions (Algebra, Algebraic and Symplectic Geometry, Discrete Mathematics, Functional and Harmonic Analysis, Mathematical Logic, Numerical Analysis, Orthogonal Polynomials and Special Functions, Statistics and Probability Theory). It will be the occasion to listen to lectures and to have discussions between senior, postdoc and Ph.D. students around several subjects of present research in maths. It will also be the occasion to discover the University and city of Liege in Belgium.
Information: http://nalag.cs.kuleuven.be/research/workshops/BSL2012/.

* 6–9 **Banach Spaces Workshop**, University of Birmingham, Birmingham, United Kingdom.
Speakers: Frederic Bayart, Universite Bordeaux; Pandelis Dodos, University of Athens; Vladimir Fonf, Ben-Gurion University; Petr Hajek, Academy of Science of the Czech Republic; Richard Haydon, University of Oxford; William Johnson, Texas A&M University; Gilles Lancien, Universite de Franche Comte; Maria Roginskaya, Goeteborgs Universitet; Gideon Schechtman, Weizmann Institute of Science; Thomas Schlumprecht, Texas A&M University; Jaroslav Tiser, Czech Technical University; Ludek Zajicek, Charles University.
Organizers: Olga Maleva, University of Birmingham; David Preiss, University of Warwick.
Information: http://tinyurl.com/banach-workshop.

* 11–13 **"Games and Strategy in Paris", held on the occasion of Sylvain Sorin's 60th birthday**, Institut Henri Poincaré, Paris, France.
Registration: Registration is free but mandatory on our website. Ph.D. students and young researchers willing to present a poster may apply for partial financial support. They are invited to submit an extended abstract (max 2 pages) to: conf.sorin@gmail.com before March 16, 2012. Notification of acceptance will be issued on March 30, 2012.
Information: https://sites.google.com/site/sorin60th/.

* 11–14 **Ninth Advanced Course in Operator Theory and Complex Analysis**, Faculty of Mathematics, University of Seville, Seville, Spain.
Description: Courses and talks will cover topics on complex analysis, operator theory and related areas of functional analysis.
Information: http://congreso.us.es/ceacyto/2012/index.html.

* 11–14 **Operator Theory, Analysis and Mathematical Physics**, Centre de Recerca Matemàtica, Bellaterra, Barcelona.
Description: This conference continues the series of OTAMP conferences organized every second year in Europe. It is devoted to recent achievements in analysis lying on the border between operator theory and mathematical physics. The following special sessions will be organized, Spectral theory: self-adjoint and non-self-adjoint problems; Orthogonal polynomials, Jacobi and CMV matrices; Random and quasi-periodic operators; Quantum graphs; Non-self-adjoint quantum mechanics.
Information: http://www.crm.cat/coptam.

* 11–15 **Mathematical Problems in Industry (MPI) Workshop 2012**, University of Delaware, Newark, Delaware.
Description: This one-week workshop is the twenty-eighth in the series, and will be held at UD for the sixth time. Modeled on the Oxford Study Group in the UK, the MPI workshop is a problem-solving workshop that attracts leading applied mathematicians and scientists from universities, industry, and national laboratories. During the workshop, engineers and scientists from industry interact closely with the academic participants on problems of interest to their companies.

Information: http://www.math.udel.edu/MPI/.

* 12–14 **Ninth Edition of the Advanced Course in Operator Theory and Complex Analysis**, Sevilla, Spain.
Description: As a part of attending the course, you have the opportunity to deliver a contributed talk.
Invited Lectures: By Håkan Hedenmalm, KTH (Sweden); Alexei Poltoratski, Texas A&M University.
Invited speakers: Wolfgang Arendt, Universität Ulm, Germany; Joseph A. Ball, Virginia Tech; Isabelle Chalendar, Université Lyon-1, France; Sjoerd Verduyn Lunel, Universiteit Leiden, Netherlands; Armen G. Sergeev, Steklov Mathematical Institute of Moscow, Russia.
Information: http://congreso.us.es/ceacyto/2012.

* 18–22 **Conference on Geometry and Quantization of Moduli Spaces (2012 VBAC Conference)**, Centre de Recerca Matemàtica, Bellaterra, Barcelona.
Scientific Committee: Peter Newstead (Chair), Usha Bhosle, Steven Bradlow, Leticia Brambila-Paz, Ugo Bruzzo, Carlos Florentino, Oscar Garcia-Prada, Peter Gothen, Daniel Hernandez Ruiperez, Alastair King, Herbert Lange, Ignasi Mundet i Riera, Christian Pauly, Alexander Schmitt, Andras Szenes.
Information: http://www.crm.cat/cmodulispaces.

* 25–29 **European Seminar on Computing (ESCO 2012)**, Pilsen, Czech Republic.
Description: ESCO 2012 is the 3rd event in a successful series of interdisciplineary meetings dedicated to modern methods and practices of scientific computing.
Main thematic areas: Multiphysics coupled problems, Higher-order computational methods, computing with python, GPU computing, and cloud computing. Theoretical results as well as applications are welcome. Application areas include, but are not limited to: Computational electromagnetics, civil engineering, nuclear engineering, mechanical engineering, nonlinear dynamics, fluid dynamics, climate and weather modeling, computational ecology, wave propagation, acoustics, geophysics, geomechanics and rock mechanics, hydrology, subsurface modeling, biomechanics, bioinformatics, computational chemistry, stochastic differential equations, uncertainty quantification, and others.
Information: http://esco2012.femhub.com/.

* 26–30 **International Conference "Probability Theory and its Applications" in Commemoration of the Centennial of Boris Vladimirovich Gnedenko**, Moscow State University, Moscow, Russia.
Description: The conference is held jointly with Steklov Mathematical Institute and Moscow Institute of Electronics and Mathematics. During the conference six one-hour general plenary talks by Russian and foreign scientists are planned.
Thematic section list: Limit theorems, Stochastic extreme value theory, Queueing theory, Mathematical reliability theory, Methods of actuarial mathematics, History of mathematics, Teaching of mathematics.
Information: http://gnedenko100conference.ru.

* 27–29 **Differential Geometry Days. In honour of Luis A. Cordero**, Departamento de Xeometría e Topoloxía, Facultade de Matematicas, Universidade de Santiago de Compostela, 15782 Santiago de Compostela, Spain.
Description: Luis A. Cordero has been a full professor of Geometry and Topology since 1976 at La Laguna Univ. and at Santiago de Compostela Univ. (USC, Spain) since 1979. The Institute of Math. of the USC in colaboration with Basque Country Univ. (UPV/EHU, Spain) and CSIC (Spain), is organizing the "Differential Geometry Days" on the occasion of his 65th birthday.
Topics: Current research topics in Differential Geometry will be treated during this conference.
Confirmed invited speakers: J. C. Díaz Ramos (USC, Spain), C.T.J. Dodson (Manchester Univ., UK), P. Gilkey (Oregon Univ., USA), S. Ivanov (Univ. of Sofia "St. Kliment Ohridski", Bulgaria), J. C. Marrero (Univ. de La Laguna, Spain), P.E. Parker (Wichita State Univ., USA), S. Salamon (King's College London, UK), L. Ugarte (Univ. de Zaragoza, Spain), I. Vaisman (Haifa Univ., Israel).
Deadline: Registration and Contribution (Poster), June 1st, 2012. The registration includes the possibility of submitting a contribution (poster).
Information: Contact: eduardo.garcia.rio@usc.es; http://xtsunxet.usc.es/cordero2012/.

July 2012

* 1–5 **Mathematical Modeling of Microbiological Systems (M3S)**, Marburg, Germany.
Description: The aim of the conference is to present the latest research in the field of computational biology with focus on mathematical methods for modeling, analysis, simulation and model optimization in system and cell biology. The program will comprise invited plenary lectures and contributed talks addressing new developments in the field of mathematical modeling of microbiological systems.
Information: email: rashkov@mathematik.uni-marburg.de; http://www.uni-marburg.de/synmikro/mathematik_tagung.

* 2–13 **Summer School on Algebraic and Enumerative Combinatorics**, Centro de estudos Camilianos, S. Miguel de Seide, Guimarães, Portugal.
Description: The summer school will be held in a building of Álvaro Siza, the 1992 Laureate of the Pritzker Architecture Prize. The Centro de estudos Camilianos is at S. Miguel de Seide, near to GuimarThees, Portugal, where the participants are expected to be lodged. The school will focus on four courses, given by Francesco Brenti, Christian Krattenthaler, Marc Noy and Vic Reiner.
Topics: The topics to be addressed by the speakers are, respectively, Combinatorics of Coxeter groups, map enumeration, asymptotic enumeration of topological graphs and reflection group counting and q-counting, and the courses are mainly directed to graduate and post-graduate students, as well as researchers. There will also be time for some contributed short talks by participants.
Information: http://www2.fc.up.pt/pessoas/agoliv/SC/default.htm.

* 5–10 **Mathematical Physics in Bahia: Algebraic Analysis, Quantization and Representations**, Instituto de Matematica, UFBA, Salvador, Brazil.
Description: The conference will cover various recent advances in the field Mathematical Physics with focus on: Algebraic analysis, mathematical aspects of quantization, noncommutative geometry in relation with quantization, topology and geometry of QFT, string theory and mirror symmetry, representation theory.
Registration: Is now open and should be done online.
Deadline: For registration: June 1st, 2012. The number of participants will be limited to 70.
Information: http://monge.u-bourgogne.fr/gdito/MPB2012/Home.html.

* 6–7 **National Conference on Mathematical and Computational Sciences**, Adikavi Nannaya University, Rajahmundry, Andhra Pradesh, India.
Description: In recent days, exploring the applications on the existing mathematical concepts has become the emerging area in mathematical research. adding up it is essential to focus on concrete mathematical structures and theories for the future applications. Hence, the conference is focused to share the views of new mathematical theories and the applications on the existing mathematical concepts.
Information: http://www.nannayauniversity.info/MACS.pdf.

* 9–27 **2012 Summer School on Geometry and Data**, Washington State University & University of Idaho, held in Moscow, Idaho.

Description: Geometric measure theory and geometric analysis offer powerful tools and insights which are just beginning to be exploited for their data analysis potential. This summer school will explore and explain aspects of geometric measure theory, applied harmonic analysis and computational methods focused on illuminating various data inspired problems.
Information: http://geometricanalysis.org/Workshops/2012SummerSchool.

* 12–19 **International Summer School on Fundamental Algorithms and Computable Modeling for High-Performance and Multi-scale Scientific/Engineering Computing**, Nankai University, School of Mathematical Sciences, No. 94 Weijin Road, Nankai District, Tianjin 300071, People's Republic of China.
Description: Since great achievements in the area of scientific and engineering computing have been made to provide plenty of new methods and outcomes from physical and engineering subjects and disciplines, such as Navier-Stokes equations from fluid dynamics, Maxwell equations from electromagnetism, solid and structural mechanics, etc. in the past few years, and since the needs of the scientific and engineering computing talented people are becoming more and more pressing, and since the way that mankind explores Nature has turned to scientific and engineering computing—the third way of scientific research, as well as the classical two scientific research ways theoretical research and physical experiment, by using supercomputers to run large-scale scientific and engineering computing in very extensive applications arising from Natural sciences and even social sciences, such as petroleum exploration, biomedicine,weather forecast, ocean and marine environment modelling, government affairs.
Information: http://www.math.nankai.edu.cn/conference/summerschool/indexen.html.

* 16–20 **Applications of Graph Spectra in Computer Science**, Centre de Recerca Matemàtica, Bellaterra, Barcelona.
Description: In graph theory, the spectra of matrices associated with a graph are widely used to characterize its properties and to extract structural information. There are several graph matrix representations such as the adjacency matrix, combinatorial Laplacian, normalized Laplacian and signless Laplacian. Spectral graph theory has also many applications in other scientific fields such as chemistry, theoretical physics, and quantum mechanics. The aim of this workshop is to foster the connections between spectral graph theory and computer science.
Information: http://www.crm.cat/wkgraphspectra.

* 16–20 **23rd International Workshop on Operator Theory and its Applications (IWOTA 2012)**, University of New South Wales, Sydney, Australia.
Description: For the past 30 years, IWOTA has brought together mathematicians working in a variety of fields that share operator theory as a common theme. In 2012, it is Australia's turn to host IWOTA. This meeting will emphasise three directions: Operator algebras, Harmonic analysis of differential operators. Control theory. Of course, the workshop will not be restricted to these three themes, and colleagues working on any aspect of operator theory, understood in a very broad sense, are encouraged to participate.
Plenary speakers: Current list: Pascal Auscher (Université Paris 11 Orsay), Joseph A. Ball (Virginia Tech), Qui Bui (University of Canterbury), Raul Curto (University of Iowa), Ron Douglas (Texas A&M University), Xuan Duong (Macquarie), Fritz Gesztesy (University of Missouri Columbia), Gilles Godefroy (Université Paris 6), Il Bong Jung (Kyungpook National University), Rien Kaashoek (VU Amsterdam), Jerry Kaminker (University of California Davis), Igor Klep (University of Auckland), Woo Young Lee (Seoul National University), Christian Le Merdy (Université de Franche-Comt), Shahar Mendelson (ANU/Technion), Jan van Neerven (TU Delft), Ben de Pagter (TU Delft), Carlos Perez (Universidad de Sevilla), Iain Raeburn (University of Otago).
Thematic Sessions: Continuous and discrete Clifford analysis (Swanhild Bernstein, Fabrizio Colombo, Uwe Kahler, Paul Leopardi), Toeplitz operators and their applications (Sergei Grudsky, Nikolai Vasilevski), Complex geometry and operator theory (Tirthankar Bhattacharyya, Nicholas Young), Operators on spaces of analytic functions (Carl Cowen), Dynamics and operator algebras (Sooran Kang, Aidan Sims), Systems and control theory (Hendra Nurdin), Harmonic analysis of differential operators (Pierre Portal), Topics in noncommutative analysis (Anna Skripka), Operator theory, function theory, and linear systems (Joe Ball, Rien Kaashoek), General session.
Organizing committee: T. ter Elst (University of Auckland), P. Portal (Australian National University/Universite Lille 1), D. Potapov (University of New South Wales).
Registration: Is now open, and can be completed online at: http://conferences.science.unsw.edu.au/IWOTA2012/register.html.
Information: http://conferences.science.unsw.edu.au/IWOTA2012/

* 16–28 **XV Summer Diffiety School**, Pomorski Park Naukowo-Technologiczny, Gdynia, Poland.
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. Moreover, it appears to be a natural language for quantum physics, just as the standard calculus is the natural language for classical physics.
Information: https://sites.google.com/site/levicivitainstitute/Activities/DiffietySchools/xv-summer-diffiety-school.

* 18–August 1 **Summer School on Discrete Morse Theory and Commutative Algebra**, Institut Mittag-Leffler, Stockholm, Sweden.
Description: The summer school will focus on recent developments in combinatorial topology and discrete geometry, with an emphasis on the interaction with toric geometry and commutative algebra. A promising contemporary method for getting simple explicit descriptions of topological spaces is discrete Morse theory. Its applications range from real world problems, such as shape recognition, to theoretical studies of topological spaces, which encode important invariants from algebra, geometry and topology. Program participants will learn how to use these state-of-the-art tools to investigate a variety of topics such as: Complements of hyperplane arrangements, resolutions of monomial and toric ideals, knots in triangulated manifolds, metric structures on simplicial complexes, spaces realizing desired cohomology rings, and topological representations of matroids.
Accommodations/Travel: Free accommodation and meals are provided. Limited travel funds. Apply by April 15 on http://www.mittag-leffler.se or follow the link.
Information: http://www.mittag-leffler.se/summer2012/summerschools/discrete_morse_theory/.

August 2012

* 1–15 **Artificial General Intelligence Summer School 2012**, Reykjavik University, Reykjavik, Iceland.
Description: This summer school focuses on issues related to the original goal of artificial general intelligence, namely that of building machines capable of operating in a range of different environments and domains, and doing a range of unrelated tasks in a coordinated manner, with a special focus on architectural and integrative issues. The summer school is targeted to those with a background in artificial intelligence and computer science, and may also be of interest

to students in philosophy, psychology and cognitive science with a background in software development or mathematics. It is open to all graduate students in all countries.
Language: The teaching language is English.
Admission: To apply for admission, send an email with a short cover letter and a CV to the following address: summerschool-2012@cadia.ru.is. A limited amount of support may be provided to a subset of applicants; to apply, please indicate this in your cover letter, and clearly state reasons for requesting the support.
Information: http://wiki.humanobs.org/public:events:agi-summerschool-2012; http://www.ru.is.

* 22–24 **Berlin PUM Workshop 2012**, Humboldt University, Berlin, Germany.
Description: The aim of this workshop is to provide an opportunity for researchers and practitioners to discuss recent research results that may support a wide applicability in PUM related approaches. To build a foundation for these discussions, a number of experts have been invited to talk about their research. The covered topics will range from theoretical analysis of PUM-based methods to applications and aspects of implementation. Anybody interested to participate is cordially invited to join the discussions and to give a presentation on his/her own research.
Invited speakers: Uday Banerjee (Syracuse University, USA), Stéphane Bordas (Cardiff School of Engineering, UK), Armando Duarte (University of Illinois, USA), Thomas Fries (RWTH Aachen, Germany), Markus Melenk (TU Wien, Austria), Yves Renard (INSA de Lyon, France), Alexander Schweitzer (Universität Stuttgart, Germany).
Information: http://www.math.hu-berlin.de/~berlin-pum-workshop2012/.

* 22–25 **The 20th Conference on Applied and Industrial Mathematics CAIM 2012**, Tiraspol State University, Chisinau, Republic of Moldova.
Description: The conference is organized by the Romanian Society of Applied and Industrial Mathematics (ROMAI), the Mathematical Society of the Republic Moldova, the Tiraspol State University, the Institute of Mathematics and Informatics of the Academy of Sciences of Moldova, the Moldova State University and the Academy of Economical Studies of Moldova.
Sections: Mathematical analysis and differential equations; Algebra and logic; Geometry and topology; Analytical and numerical methods in partial differential equations; Computer sciences; Mathematical models in industry, Physics and biology; Education.
Information: http://www.romai.ro/index.php?option=com_content&view=article&id=207&Itemid=498.

* 23–26 **International Congress in Honour of Professor H. M. Srivastava**, The Auditorium at the Campus of Uludag University, Bursa, Turkey.
Description: The forthcoming International Congress in Honour of Professor H. M. Srivastava is motivated essentially by the remarkable popularity and success of the well-attended four-day International Congress Dedicated to Professor Srivastava on the Occasion of his 70th Birth Anniversary, which was held in August 2010 at Hotel Karinna in Mount Uludag (Bursa) under the auspices of Uludag University. This congress will be organized at the Gorukle Campus of Uludag University in the fourth largest city, Bursa in Turkey in honour of Professor Dr. Hari Mohan Srivastava. It will cover a wide range of topics of Mathematics, Statistics and related sciences. Visit http://srivastava2012.uludag.edu.tr/.
Information: http://srivastava2012.uludag.edu.tr/.

September 2012

* 3–7 **Dynamical Systems: 100 years after Poincaré**, University of Oviedo, Gijn, Spain.
Description: The conference is organized by the Dynamical Systems Group at the University of Oviedo. The aim is to bring together a broad group of scientists working in the field of dynamical systems on the occasion of the 100th anniversary of the death of Henri Poincaré. All topics related to dynamical systems are considered but focusing on local and global bifurcations in discrete and continuous dynamical systems, planar vector fields and celestial mechanics. Applications to real-world problems will be highlighted. The conference will promote the diffusion of recent developments and future perspectives. There will be ten keynote speakers, sixty-four 30-minute contributed talks in two parallel sessions and also two poster sessions. Plenary speakers are experts chosen from different areas of Dynamical Systems.
Information: http://www.unioviedo.es/ds100Poincare/.

* 5–7 **Complex patterns in wave functions: Drums, graphs, and disorder**, Kavli Royal Society International Centre, Chicheley Hall, Chicheley, Newport Pagnell, Buckinghamshire MK16 9JJ, UK.
Description: Wave functions display complex patterns which are intensively studied in many branches of Mathematics and Physics. Their value distributions, nodal sets, extreme values, and localization properties – to cite a few examples – are investigated using diverse methods developed within a network of fields whose connectivity leaves a lot to be desired. This conference gives a unique opportunity to discuss these common questions, and present different points of view and methods, yet in a single high-level forum. A set of world-leading researchers has been invited to lecture on their recent contributions to the field. The participants will have the opportunity to present contributions in a poster session and discuss future directions across discipline borders.
Information: http://royalsociety.org/events/Complex-patterns-in-wave-functions/

* 7–12 **Workshop on Stochastic and PDE Methods in Financial Mathematics**, Yerevan State University, Yerevan, Armenia.
Description: Institute of Mathematics of the National Academy of Sciences in association with Yerevan State University and American University of Armenia is organizing an international workshop in Stochastic and PDE Methods in Financial Mathematics, September 7–12, 2012.
Objective: The objective of this workshop is to bring together experts in the area of partial differential equations and stochastic analysis, working within financial mathematics to encourage and give an opportunity to young mathematicians in the region, to initiate contacts with experts in this area, and to stimulate contacts between theoretical and applied science and financial companies of the region having interests in development of mathematical modelling and research. The program of the workshop will consist of invited 50-minute plenary lectures and contributed 20-minute talks, poster sessions as well as short presentations.
Information: http://math.sci.am/conference/sept2012/index.html.

* 10–14 **6th International Conference on Stochastic Analysis and its Applications**, The Mathematical Research and Conference Center of the Institute of Mathematics of the Polish Academy of Sciences, Bedlewo, Poland.
Description: The conference will be the 6th in a series of international conferences on Stochastic Analysis and Its Applications. The previous ones were held at Seattle (2006), Seoul (2008), Beijing (2009), Osaka (2010) and Bonn (2011). The main topics of the conference are 1. Dirichlet forms and stochastic analysis; 2. Jump processes; 3. Stochastic partial differential equations; 4. Stochastic analysis and geometry; 5. Optimal transport and allocation problems; 6. Potential theory; 7. Random media, percolation clusters and fractals; 8. Stochastic models in physics and biology
Information: http://bcc.impan.pl/6ICSA/.

* 11–14 **Workshop on Operator Theory and Operator Algebras 2012–WOAT 2012**, Instituto Superior Técnico, Universidade Técnica de Lisboa, Portugal.
Description: The main scientific goal of WOAT 2012 is to present developments in operator theory, operator algebras and their applications, and to promote research exchanges in the operator theory and operator algebras areas. This workshop is dedicated to Professor António Ferreira dos Santos.
Information: http://www.math.ist.utl.pt/~woat2012.

* 20–October 20 **ERC research period on Diophantine Geometry**, Centro di Ricerca Matematica "Ennio De Giorgi", Scuola Normale Superiore, Piazza dei Cavalieri 3, 56100 Pisa, Italy.
Description: This event is part of the European Research Council programme. Beyond the natural scientific exchange among participants, the activities should consist of seminars. The event should focus on integral points, algebraic dynamics, unlikely intersections.
Scientific committee: Enrico Bombieri (Institute for Advanced Study), David Masser (University of Basel), Lucien Szpiro (Graduate Center, CUNY), Gisbert Wuestholz (ETH, Zürich) and Shou-Wu Zhang (Columbia University and Princeton University).
Local committee: Pietro Corvaja (University of Udine), Roberto Dvornicich (University of Pisa), Umberto Zannier (Scuola Normale Superiore, ERC coordinator).
Attendance/Registration/Financial Support: Is free, but registration is required. To register please link to http://www.crm.sns.it/event/242/registration.html. Financial support is available for invited participants only.
Information: http://www.crm.sns.it, crm@sns.it; http://www.crm.sns.it/event/242/.

* 24–27 **Eighth National Congress on Finite Element Method**, School of Mathematical Sciences, Nankai University 94 Weijin Road, Nankai District, Tianjin 300071, China.
Description: The Eighth National Congress on Finite Element Method will be held in Nankai University in Tianjin on September 24-27, 2012. This congress aims at providing a forum for computational mathematicians, scientists and engineers to meet and exchange ideas, research results and state-of-the-art themes and topics in various scientific and engineering disciplines related to finite element methods.
Information: http://www.math.nankai.edu.cn/conference/fem8/8thfem_Eg/Home.

* 24–28 **Mathematics and Physics of Moduli Spaces**, Heidelberg University, Germany.
Description: The main thematic focus is higher Teichmueller spaces and the various contexts in which they arise in theoretical physics. The goal of this activity is to make recent developments accessible to both mathematicians and physicists. The program will consist of lecture series given by Vladimir Fock, Edward Frenkel, Sergei Gukov, Francois Labourie, Greg Moore (tbc) and Joerg Teschner and a few additional talks. There will be plenty of time for informal discussions. Young researchers can apply for financial support to attend the workshop at the webpage.
Information: http://www.match.uni-heidelberg.de/MPMS/.

October 2012

* 22–26 **AIM Workshop: Lipschitz metric on Teichmüller space**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will be devoted to recent developments and new directions in Teichmüller theory from the point of view of Thurston's Lipschitz metric.
Information: http://aimath.org/ARCC/workshops/lipschitzteich.html.

* 29–31 **The 17th edition of the Symposium on Solid and Physical Modeling**, University of Burgundy, Dijon, France.
Description: The Symposium on Solid and Physical Modeling 2012 (SPM'2012) is organized in cooperation with SIAM and in cooperation with ACM SIGGRAPH (pending).
Focus: The focus of the conference is on the mathematical and computational issues that arise in generating, analyzing, and processing geometric information in applications such as: mechanical design, process planning, manufacturing, bio-medical, games, animation, geology, and virtual reality. The proceedings of SPM2012, including full papers and short papers, will be published as a special issue of the *Journal of Computer Aided Design* (Elsevier). Technical papers should present previously unpublished, original results that are not simultaneously submitted elsewhere. All papers will be rigorously peer-reviewed by members of the international program committee.
Important Dates: Abstracts Due: March 25, 2012. Paper Submissions Due: April 2, 2012.
Information: http://spm12.u-bourgogne.fr; http://spm12.u-bourgogne.fr.

* 29–November 2 **Cluster Algebras in Combinatorics, Algebra, and Geometry**, Mathematical Sciences Research Institute, Berkeley, California.
Description: Cluster algebras provide a unifying algebraic/combinatorial framework for a wide variety of phenomena in settings as diverse as quiver representations, Teichmuller theory, Poisson geometry, Lie theory, discrete integrable systems, and polyhedral combinatorics. The workshop aims at presenting a broad view of the state-of-the-art understanding of the role of cluster algebras in all these areas, and their interactions with each other.
Information: http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm570

November 2012

* 1–3 **The 13th International Conference of Mathematics and its Applications ICMA2012**, Department of Mathematics, "Politehnica" University of Timisoara, City of Timisoara, Romania.
Description: The aim of the conference is to bring together mathematicians, engineers, economists, physicians from all over the world, with research interests in mathematics or in its applications and to attract original papers.
Topics: Mathematical Analysis and Applications, Algebra and Geometry, Computer Algebra Systems in Research, Applied Mathematics in Engineering, and Economics Probability and Statistics, Applications in Health and Clinical Research.
Information: http://www.mat.upt.ro/ICMA2012/index.htm.

* 16–18 **Special Functions, Partial Differential Equations and Harmonic Analysis, a conference in honor of Calixto P. Calderón**, Roosevelt University, 425 Wabash Ave, Chicago, Illinois.
Description: A group of friends of Calixto P. Calderón have decided to organize a conference to celebrate his research and academic archivements in his long academic career.
Confirmed main speakers: Carlos Kenig, University of Chicago; Mario Milman, Florida Atlantic University; Yoram Sagher, Florida Atlantic University; Ahmed Zayed, DePaul University; Marshall Ash, DePaul University; Alberto Torchinsky, Indiana University; Richard Wheeden, Rutgers University; Robert Fefferman, University of Chicago; Jeff Lewis, University of Illinois at Chicago; Richard Askey, University of Wisconsin; Rodolfo Torres, University of Kansas; James Moller, University of Illinois at Chicago; Alexandra Bellow, Northwestern University.
Information: http://www.roosevelt.edu/calderon.

* 29–December 1 **2012 Third International Conference on Emerging Applications of Information Technology (EAIT 2012)**, Indian Statistical Institute, Kolkata, India.
Description: The Computer Society of India (CSI) has been instrumental in guiding the Indian IT industry since its formative years. The mission of CSI is to facilitate research, knowledge sharing, learn-

ing and career enhancement for all categories of IT professionals, while simultaneously inspiring and nurturing new entrants into the industry and helping them to integrate into the IT community. Encouraged by the earlier events, EAIT 2006 (proceedings published by Elsevier) and EAIT 2011 (proceedings published by IEEE CS and Xplore), CSI Kolkata Chapter is organizing the Third International Conference on Emerging Applications of Information Technology (EAIT 2012). The event will be comprised of Pre-Conference Tutorials, plenary sessions, invited lectures by eminent speakers of international repute, session papers and panel discussions. Detailed call for papers can be found at: https://sites.google.com/site/csieait2012/cfp.
Information: http://sites.google.com/site/csieait2012.

December 2012

* 3–7 **Combinatorial Commutative Algebra and Applications**, Mathematical Sciences Research Institute, Berkeley, California.
Description: This workshop on Combinatorial Commutative Algebra aims to bring together researchers studying toric algebra and degenerations, simplicial objects such as monomial ideals and Stanley-Reisner rings, and their connections to tropical geometry, algebraic statistics, Hilbert schemes, D-modules, and hypergeometric functions.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm571.

* 10–14 **AIM Workshop: Log minimal model program for moduli spaces**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will be devoted to applications of the minimal model program (MMP) to the study of geometry of moduli spaces of algebraic varieties.
Information: http://www.aimath.org/ARCC/workshops/logminmoduli.html.

* 17–21 **AIM Workshop: Rational Catalan Combinatorics**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will be devoted to understanding the interaction between new developments in algebra and combinatorics. In particular, it will focus on combinatorial objects counted by generalizations of Catalan numbers and their interaction with the representation theory of Cherednik algebras.
Information: http://aimath.org/ARCC/workshops/rationalcatalan.html.

April 2013

* 8–10 **Fourteenth International Conference on Numerical Combustion (NC13)**, Holiday Inn Riverwalk, San Antonio, Texas.
Description: Advances in computational algorithms, hardware, and software continue to have a revolutionary impact on the combustion sciences and permit the examination of scientific and engineering problems of increasing complexity. Detailed combustion simulations and models are now being considered as part of integrated system applications. The International Conference on Numerical Combustion will focus on the integration of theory, modeling, and numerical implementation in the study of basic combustion physics and technological applications. The distinct questions and challenges found in combustion and phase transitions arise from the multiplicity of length and time scales defined by the chemical, geometric, and flow ingredients. Physically descriptive, efficient, and accurate numerical modeling of complex phenomena and the design and implementation of complex, integrated simulation are the challenges to be addressed at this conference.
Information: http://www.siam.org/meetings/nc13/.

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.

June 2013

* 4–14 **Conference on Nonlinear Mathematical Physics: Twenty Years of JNMP**, The Sophus Lie Conference Center, Nordfjordeid, Norway.
Description: The conference is a celebration of the twentieth anniversary of the *Journal of Nonlinear Mathematical Physics* (JNMP), which is published jointly by World Scientific and Atlantis Press.
Aim: To bring together experts and young scientists in the area of Mathematical Physics that concern Nonlinear Problems in Physics and Mathematics.
Main topic: The main topic is centered around the scope of JNMP: continuous and discrete integrable systems including ultradiscrete systems, nonlinear differential and difference equations, applications of Lie transformation groups and Lie algebras, nonlocal transformations and symmetries, differential-geometric aspects of integrable systems, classical and quantum groups, super geometry and super integrable systems.
Information: http://staff.www.ltu.se/~johfab/jnmp/index.html.

July 2013

* 20–25 **European Meeting of Statisticians**, Eotvos Lorand University, Budapest, Hungary.
Description: The European Meeting of Statisticians is uniquely the broadest and most prestigious regular meeting of the profession in Europe, having long history and well established traditions. Two distinguishing features of the current occasion are worth being emphasized, however. Beyond providing a natural forum for exchange of ideas for European statisticians and probabilists, particular organisational effort has been made to represent both traditional and newly emerging ties of the European professionals with the whole World. Hence, we expect colleagues from India, China, South-East Asia, the Middle-East, North- and Latin-America to participate in greater than usual number. It is also the ambition of the organisers to stimulate the inseminating tie between probability and statistics by a balanced representation of intertwined topics of both disciplines. The year 2013 itself provides the framework as it brings a number of celebrating anniversaries of probability theory and statistics.
Information: http://www.ems2013.eu.

August 2013

* 3–11 **Groups St. Andrews 2013**, University of St. Andrews, St. Andrews, Fife, Scotland, UK.
Description: This conference, the ninth in the series of Groups St. Andrews conferences, will be organized along similar lines to previous events in this series. The conference aims to cover all aspects of group theory, and to be accessible to postgraduate students, postdoctoral fellows, and researchers in all areas of group theory.
Speakers: The principal speakers will each deliver a short lecture course: Emmanuel Breuillard (Université Paris-Sud 11), Martin Liebeck (Imperial College, University of London), Alan Reid (University of Texas), Karen Vogtmann (Cornell University). The one-hour speakers are: Inna Capdeboscq (University of Warwick), Radha Kessar (University of Aberdeen), Markus Lohrey (Universität Leipzig), Derek Robinson (University of Illinois at Urbana-Champaign), Christopher Voll (University of Bielefeld). There will be further plenary talks, the opportunity for contributed talks, and an extensive social programme. The webpage for expressions of interest is now open.
Information: http://www.groupsstandrews.org/2013/index.shtml.

* 22–23 **Connections for Women on Optimal Transport: Geometry and Dynamics**, Mathematical Sciences Research Institute, Berkeley, California.
Description: This two-day event aims to connect women graduate students and beginning researchers with more established female researchers who use optimal transportation in their work and can serve as professional contacts and potential role-models. As such, it will showcase a selection of lectures featuring female scientists, both established leaders and emerging researchers. These lectures will be interspersed with networking and social events such as lunch or tea-time discussions led by successful researchers about (a) the particular opportunities and challenges facing women in science, including practical topics such as work-life balance and choosing a mentor, and (b) promising new directions in optimal transportation and related topics. Junior participants will be paired with more senior researchers in mentoring groups, and all participants will be encouraged to stay for the Introductory Workshop the following week, where they will have the opportunity to propose a short research communication.
Information: http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9225.

* 26–30 **Introductory Workshop on Optimal Transport: Geometry and Dynamics**, Mathematical Sciences Research Institute, Berkeley, California.
Description: The workshop is intended to give an overview of the research landscape surrounding optimal transportation, including its connections to geometry, design applications, and fully nonlinear partial differential equations. As such, it will feature some survey lectures or minicourses by distinguished visitors and/or a few of the organizers of the theme semester, amounting to a kind of summer school. These will be complemented by a sampling of research lectures and short presentations from a spectrum of invited guests and other participants, including some who attended the previous week's *Connections for Women* workshop.
Information: http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9226.

September 2013

* 3–4 **Connections for Women: Mathematical General Relativity**, Mathematical Sciences Research Institute, Berkeley, California.
Description: Ever since the epic work of Yvonne Choquet-Bruhat on the well-posedness of Einstein's equations initiated the mathematical study of general relativity, women have played an important role in many areas of mathematical relativity. In this workshop, some of the leading women researchers in mathematical relativity present their work.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9551.

* 9–13 **Introductory Workshop: Mathematical General Relativity**, Mathematical Sciences Research Institute, Berkeley, California.
Description: Mathematical relativity is a very widely ranging area of mathematical study, spanning differential geometry, elliptic and hyperbolic PDE, and dynamical systems. We introduce in this workshop some of the leading areas of current interest, with a special focus on those areas which are related to the geometry and physics of the initial data of general relativity, and those which primarily involve Riemannian geometry and elliptic PDE.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9552.

October 2013

* 14–18 **Fluid Mechanics, Hamiltonian Dynamics, and Numerical Aspects of Optimal Transportation**, Mathematical Sciences Research Institute, Berkeley, California.
Description: The workshop will be devoted to emerging approaches to fluid mechanical, geophysical and kinetic theoretical flows based on optimal transportation. It will also explore numerical approaches to optimal transportation problems.
Information: http://www.msri.org/web/msri/scientific/workshops/all-workshops/show/-/event/Wm9227.

November 2013

* 18–22 **Evolution Problems in General Relativity**, Mathematical Sciences Research Institute, Berkeley, California.
Description: With cosmic censorship, the formation of black holes, and the stability of Kerr black holes as focus problems, the study of the evolution of solutions of Einstein's equations has made dramatic progress in recent years. In this workshop, we highlight some of this recent development, and examine the major areas in which future progress is likely.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9554.

January 2014

* 23–24 **Connections for Women: Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California.
Description: This two-day workshop will consist of short courses given by prominent female mathematicians in the field. These introductory courses will be appropriate for graduate students, post-docs, and researchers in related areas. The workshop will also include a panel discussion featuring successful women at various stages in their mathematical careers.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9545

* 27–31 **Introductory Workshop: Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California.
Description: Algebraic topology is a rich, vibrant field with close connections to many branches of mathematics. This workshop will describe the state of the field, focusing on major programs, open problems, exciting new tools, and cutting edge techniques.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9546.

April 2014

* 7–11 **Reimagining the Foundations of Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California.
Description: Recent innovations in higher category theory have unlocked the potential to reimagine the basic tools and constructions in algebraic topology. This workshop will explore the interplay between these higher and ∞-categorical techniques with classical algebraic topology, playing each off of the other and returning the field to conceptual, geometrical intuition.
Information: http://www.msri.org/web/msri/scientific/workshops/programmatic-workshops/show/-/event/Wm9550.