
Mathematics Calendar

The most comprehensive and up-to-date Mathematics Calendar information is available on the AMS website at <http://www.ams.org/mathcal/>.

May 2007

*4-5 **31st SIAM Southeastern-Atlantic Section Meeting**, The University of Memphis, Memphis, Tennessee.

Description: The conference will feature plenary talks, special sessions, contributed lectures and a student paper session. Plenary talks will be given by Pete Casazza (University of Missouri), Erica Flapan (Pomona College), Yuriko Renardy (Virginia Tech) and Michael Shearer (North Carolina State University).

Deadlines/Information: Visit: <http://www.msci.memphis.edu/siam-seas/>.

*4-6 **Workshop on Financial Engineering for Actuarial Mathematics**, University of Michigan, Ann Arbor, Michigan.

Program: The workshop is aimed at researchers working at the interface of finance and insurance, including probabilists, financial mathematicians, and actuaries. Conference themes include insurance pricing and hedging; risk measures; event and mortality risk in insurance markets; insurance contract design; interest rate methods in actuarial applications. Registration is free, but space is limited.

Invited Speakers: Tomas Björk (Stockholm School of Economics), Andrew Cairns (Heriot-Watt), Sam Cox (Georgia State), Mary Hardy (Waterloo), Bruce Jones (Western Ontario), Moshe Milevsky (York), Martin Schweizer (ETH), Elias Shiu (Iowa), Shaun Wang (Georgia State), Thaleia Zariphopoulou (UT Austin).

Sponsorship and Travel Awards: Sponsored by NSF, ERM-II, and University of Michigan Department of Mathematics. Funds are available for partial support of travel expenses for graduate students and junior faculty.

Information: <http://www.umich.edu/~mludkov/feamWorkshop/> or email: feam07@umich.edu.

*7-11 **Random and Dynamic Graphs and Networks**, UCLA, Los Angeles, California.

Scientific Overview: This workshop will bring together experts with diverse backgrounds to discuss current challenges in modeling and analyzing networked structures, with a specific focus on dynamics of networks (i.e., how do real-world networks such as the World-Wide-Web evolve over time) and dynamics over networks (i.e., for networks that carry some form of traffic, what is its dynamic and how does it interact with the network). This workshop is part of IPAM's long program on Random Shapes.

Application/Registration: An application/registration form is available at <http://www.ipam.ucla.edu/programs/rsws3/>. The application is for people requesting financial support to attend the workshop. If you don't intend to do this, you may simply register. Applications will be accepted up until March 26, 2007. For the fullest consideration we urge you to apply as early as possible. Successful applicants will be notified as soon as funding decisions are made. We have funding to support the attendance of recent Ph.D.'s, graduate students, and researchers in the early stages of their career. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

Information: email: sbeggs@ipam.ucla.edu.

*7-11 **Statistical Methods for Genetic Epidemiology**, ICMS, Edinburgh, Scotland.

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

*17-20 **Workshop on Linear Logic, Ludics, Implicit Complexity and Operator Algebras: Dedicated to Jean-Yves Girard on his 60th birthday**, University of Siena, at the Certosa di Pontignano,

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 held in North America 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. Meetings held outside the North American area may carry more detailed information. In any case, 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/>.

Siena, Italy.

Aim: The aim is to gather people working in the many research streams originating from Girard's main achievements of the recent years.

Themes: For each of the four main themes—Linear Logic (specifically, Proof Nets and Geometry of Interaction), Ludics, Implicit Complexity and Operator Algebras—there will be in-depth lectures (3 to 4 hours), with emphasis on the state of the art and prospects for future development. There will also be some time for 30-minute contributed papers and for discussion of general perspectives and philosophical foundations.

Organizers: V. M. Abrusci (Roma), C. Faggian (Paris), S. Martini (Bologna), S. Ronchi Della Rocca (Torino), A. Ursini (Siena).

Speakers: Patrick Baillot, Pierre-Louis Curien, Alberto Dal Lago, Claudia Faggian, Jean-Yves Girard, Paul Andre Mellies Michele Pagani, Laurent Regnier, Kazushige Terui.

Information: <http://www.unisi.it/eventi/LOGIC/>.

- * 18–20 **International Conference on Special Functions & their Applications (7th Annual Conference of SSFA, India)**, St. Thomas College, Arunapuram P.O., Pala, Kottayam, Pin 686574, Kerala, India.

Information: <http://www.ssfa.gq.nu/conf.htm>.

- * 21–25 **Image Processing for Random Shapes: Applications to Brain Mapping, Geophysics and Astrophysics**, UCLA, Los Angeles, California.

Scientific Overview: Random shapes occur in many physical and biological models and applications, and image processing of these random shapes is very challenging. This workshop will bring together experts in image processing, mathematics, biology and medicine, and physical sciences. Topics discussed in the workshop include, but are not limited to: brain imaging and measures of complexity; random fields in brain science; complexity in cortex or brain morphology; shrinking and wrinkling of anatomical structures; filaments and large scale structures in the cosmos; random fields; geometry and the Gaussian free field; distribution of dark matter; 3D image processing and graphics for complex surfaces in the geophysical sciences; computational geometry for complex sets and surfaces. This workshop is part of IPAM's long program on Random Shapes.

Application/Registration: An application/registration form is available at <http://www.ipam.ucla.edu/programs/rsws4/>. The application is for people requesting financial support to attend the workshop. If you don't intend to do this, you may simply register at any time. Applications will be accepted up until April 9, 2007. For the fullest consideration we urge you to apply as early as possible. Successful applicants will be notified as soon as funding decisions are made. We have funding to support the attendance of recent Ph.D.'s, graduate students, and researchers in the early stages of their career. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

Information: email: sbeggs@ipam.ucla.edu.

- * 26–27 **Vlora Conference on Algebra, Coding Theory, and Cryptography**, Vlora, Albania.

Description: The main goal is to bring together researchers in a relaxing atmosphere in order to foster cooperation.

Topic: This year's topic of the conference will be algebra, coding theory, and cryptography.

Information: <http://www.albmath.org/vlconf/>.

Organizers: T. Shaska, shaska@oakland.edu; Edgar Martinez Moro, edgar@maf.uva.es.

Registration: There is no registration fee. However, you must register in advance in order to attend the conference. No exceptions will be made for anyone. We will arrange to pick you up from the airport, to help with hotels, etc.

Information: <http://www.albmath.org/vlconf/>.

- * 26–28 **Mathematical Theories of Abstraction, Substitution and Naming in Computer Science**, ICMS, Edinburgh, Scotland.

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

- * 30–June 1 **Short Course on Sparse Representations and High Dimensional Geometry (in conjunction with the AMS 2007 Von Neumann Symposium)**, UCLA, Los Angeles, California.

Aim: This associated short course will be held five weeks prior to the 2007 Von Neumann Symposium. The principle aim is to provide a firm foundation in sparse approximation to members of the scientific community new to the topic — before the Von Neumann Symposium. Each speaker will give three informal 50 minute tutorials on his or her area of expertise, conveying his or her unique perspective. Speakers will be in residence for the entire three day meeting and will be available to participants for in depth discussions.

Speakers: Anna Gilbert (University of Michigan), Justin Romberg (Georgia Institute of Technology), Jared Tanner (University of Utah), Joel Tropp (University of Michigan), Roman Vershynin (UC Davis), Jing Zou (University of Maryland).

Application/Registration: An application/registration form is available at <http://www.ipam.ucla.edu/programs/vn2007/>. The application is for people requesting financial support to attend the workshop. If you don't intend to do this, you may simply register. We urge you to apply as early as possible. Applications received by April 18, 2007, will receive fullest consideration. Successful applicants will be notified as soon as funding decisions are made. We have funding to support the attendance of recent Ph.D.'s, graduate students, and researchers in the early stages of their career; however, mathematicians and scientists at all levels who are interested in this area are encouraged to apply for funding. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

Information: email: sbeggs@ipam.ucla.edu.

June 2007

- * 2007 **International Conference on Learning**, Johannesburg, South Africa.

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

- * 10–15 **IPM Logic Conference 2007**, School of Mathematics, Institute for Studies in Theoretical Physics and Mathematics (IPM), Tehran, Iran.

Goal: The goal of the conference is to give an introduction to current research topics in various aspects of mathematical logic as well as presentation of the latest applications into mathematics and computer science.

Call for Papers: Participants who wish to contribute a talk should submit their abstracts to logic2007@ipm.ir no later than April 30, 2007. Local expenses will be paid for those whose abstracts are accepted.

Deadlines: Deadline for submission of abstract of contributed talks: April 30, 2007. Deadline for registration: May 21, 2007.

Contact: School of Mathematics, IPM, Niavaran Square, Niavaran Street, P.O. Box: 19395-5746, Tehran, Iran; tel: (+98) 21 22290928; fax: (+98) 21 22290648; email: logic2007@ipm.ir. For more information, please see the following link: <http://www.ipm.ac.ir/logic2007/>.

- * 11–16 **QTRF4 – Quantum Theory: Reconsiderations and Foundations 4**, International Centre for Mathematical Modelling in Physics, Engineering and Cognitive Sciences at Vaxjo University, Sweden.

Description: This conference is devoted to quantum foundations, especially clarification of fundamental questions (physical, mathematical and even philosophical). This conference is devoted to the 80 years of the Copenhagen Interpretation.

Invited speakers: V. Belavkin, University of Nottingham, UK, I. Bengtsson, Stockholm University, Sweden, E. Binz, University of Mannheim, Germany, Yu. Bogdanov, Moscow State University, Russia, T. H. Boyer, City College of the CUNY, USA, G. Cassinelli, Università di Genova, Italy, G. D'Ariano, University of Pavia, Italy, W. De Baere, University of Ghent, Belgium, H. D. Doebner, University of Clausthal, Germany, W. Freudenberg, University of Cottbus, Germany, B. Hellsing, Chalmers Göteborg, Sweden, K. Hess, University of Illinois, USA, R. Hudson, University of Nottingham, UK, G. Jaeger, Boston University, USA, A. Yu. Khrennikov, Växjö University, Sweden, P. Lahti, University of Turku Finland, J.-Å. Larsson, Linköping University, Sweden, N. Landsman, University of Nijmegen, The Netherlands, M. Manko, Lebedev Physical Institute, Moscow, Russia, V. Manko, Lebedev Physical Institute, Moscow, Russia, Th. Nieuwenhuizen, Amsterdam University, The Netherlands, Yu. Ozhygov, Moscow State University, Russia, J.G. Pereira, Universidade Estadual Paulista, Brasil, D. Petz, University of Budapest, Hungary, A. Plotnitsky, Purdue University, USA, P. Rocchi, IBM, Rome, Italy, M. Scully, University of Texas-Austin, USA, G.L. Sewell, Queen Mary, University of London, UK, S. Stenholm, KTH - Royal Institute of Technology, Sweden, W. von Waldenfels, University of Heidelberg, Germany.

Deadline: Abstract and application form has to be sent before April 15th, 2007.

Information: <http://www.vxu.se/msi/aktuell/t/konferens/index.xml>.

* 15–17 **Algebraic Methods in Functional Analysis**, Chalmers University of Technology and Gothenburg University, Gothenburg, Sweden.

Organizers: Volodymyr Mazorchuk, Lyudmila Turowska.

Information: <http://www.math.chalmers.se/~turowska/workshop/index.html>.

* 16–19 **XVI Congreso Nacional de Matematicas**, Medellin, Colombia.

Information: <http://www.scm.org.co/index.php?hoja=Congreso2007/>.

* 18–22 **Cherednik Algebras**, University of Edinburgh, Edinburgh, Scotland.

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

* 19–22 **Thirteenth Annual Conference of African American Researchers in the Mathematical Sciences (CAARMS13)**, Northeastern University and University of Massachusetts, Boston, Massachusetts.

Organizers: Donald R. King (d.king@neu.edu), Alfred G. Noel (anoel@math.umb.edu), William A. Massey (wmassey@princeton.edu).

* 25–28 **The 2007 World Congress in Computer Science, Computer Engineering, and Applied Computing: WORLDCOMP'07**, Las Vegas, Nevada.

Information: A link to each conference's URL can be found at: <http://www.worldacademyofscience.org/worldcomp07/>.

* 25–29 **Number Theory and Computability**, ICMS, Edinburgh, Scotland.

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

* 25–29 **Summer School on Algebra and Combinatorics**, CELC, University of Lisbon, Portugal.

Description: The "Summer School on Algebra and Combinatorics" will consist of courses of five one-hour lectures, supplemented by seminars and/or posters and informal talks. The school is mostly addressed to graduate students or researchers interested in algebraic aspects of combinatorics.

Information: <http://alg-comb.cii.fc.ul.pt/>.

* 26–30 **ICDS International Conference on Dynamical Systems 2007**, Abant İzzet Baysal University, Bolu, Turkey.

Aim: The aim of this conference is to present new research activities (theoretical and practical) on geometrical aspects of dynamic systems and the recent developments to other scientists. High Quality Research Submissions are invited for technical papers describing original unpublished results of theoretical, empirical, conceptual, and experimental work.

Confirmed Speakers: E. Pawlusewicz, Białystok, Poland; G. Naber, Philadelphia, USA; G. Khadekar, Nagpur, India; G. Todorova, Tennessee, USA; R. Santilli, Florida, USA; Robert Devaney, Boston, USA; T. Dereeli, İstanbul, Turkey; T. Onder Ankara, Turkey; Giuseppe Quartieri Ýtaly; Alptekin Erkollar, Klagenfurt, Austria; Erik Trell, Linköping, Sweden; Raúl Falcón Gafarnian, Sevilla, Spain; Juan Nunes Valdes, Sevilla, Spain; Allaberen Ashrallyev, İstanbul, Turkey.

Deadlines: The last day for registration is 30 April 2007. The last day for submitting papers is 30 May 2007.

Contact: İzzet Baysal Kampüsü, Fen Edebiyat Fakültesi, Matematik Bölümü, 14280 Bolu, Turkey; tel: +90-374-2541000; fax: +90-374-2534642; <http://www.dynamicalsystems.ibu.edu.tr>; email: dynamicalsystems@ibu.edu.tr.

* 30–July 1 **Advanced Numerical Techniques in Applied Dynamical Systems**, Centre de recherches mathématiques, Université de Montréal, Montréal, Canada.

Lectures: Lectures will be aimed in the first instance at graduate students and postdoctoral fellows who have a need for advanced numerical techniques in the study of applied dynamical systems that arise in their research. It is expected that there will also be experienced researchers in dynamical systems and its applications who will be interested in the course. The lectures will be followed by work sessions, where the lecturers and additional experts will be present to assist the participants with basic numerical experiments and with more advanced numerical computations that arise in the research of the participants. Assistance and advice will be available on several levels, ranging from technical assistance with software and issues related to numerical algorithms, to theoretical issues related to mathematical models under consideration.

Format: The format of the course will consist of invited lectures by experts in applied dynamical systems who are known for their contributions to the theory and the software implementation of advanced numerical techniques, and who are also recognized as excellent lecturers. The lecturers will be strongly encouraged to include illustrative computer demonstrations in their presentation.

Organizers: E. Doedel (Concordia), H. Osinga (Bristol).

Information: email: paradis@crm.umontreal.ca.

July 2007

* 2–6 **Advanced Algorithms and Numerical Software for the Bifurcation Analysis of Dynamical Systems**, Centre de recherches mathématiques, Université de Montréal, Montréal, Canada.

Description: There is an increased need for advanced computational and visualization tools in the study of dynamical systems that arise in important physical applications, and that are modeled by complicated or large-scale systems of equations. The computational tools must provide capabilities that go well beyond simple simulation: for example, they identify and classify important bifurcations, and they determine critical manifolds in phase space or in parameter space that separate regions of fundamentally different dynamics. Such tools must also be applicable to conservative systems and to systems possessing certain symmetries. State-of-the-art graphical tools are typically required for the representation and the interpretation of such computational results. This workshop will bring together computational scientists and applied mathematicians who develop such advanced computational and visualization tools, or who have a strong need for such tools in their investigations. The emphasis will be on the numerical analysis of discrete and continuous dynamical systems that model important physical phenomena. Specific topics include algorithms

and software for the computation and visualization of bifurcations, invariant manifolds, and traveling wave phenomena, in nonlinear ordinary differential equations, delay and functional differential equations, and in certain classes of partial differential equation, especially nonlinear parabolic systems.

Organizers: E. Doedel (Concordia), H. Osinga (Bristol).

Information: <http://www.crm.math.ca/Dynamics2007/>.

* 2–6 **9th Conference on Orthogonal Polynomials Special Functions and Applications (OPSFA9)**, International Center for Mathematical Meetings, Marseille, France.

Scopes: They are traditionally rather wide and include selected topics on: Special Functions, OP and q-Extensions, q-Difference Equations, OPRL and OPUC, Real and Complex Jacobi Matrices, Jacobi Matrices and Integrability, Hermite-Padé Approximants, Continued Fractions, Determinate and Indeterminate Moment Problems, Riemann-Hilbert Approach to OP, Matrix OP.

Organizers: Jacek Gilewicz (Toulon, France), Roland Triay (Marseille, France), Galliano Valent (Paris, France).

Information: http://www.cpt.univ-mrs.fr/~cosmo/WEB_OPSFA9/OPSFA9.html.

* 8–21 **37th Probability Summer School**, Saint-Flour, France.

Speakers: J. Buzzi, F. den Hollander, J. Mattingly.

Information: <http://math.univ-bpclermont.fr/stflour/>.

* 9–13 **PRACQSYS 2007: The Principles and Applications of Control in Quantum Systems**, Sydney, Australia.

Topics: Quantum feedback control, real time feedback control of quantum systems, open loop quantum control, mathematical foundations: non-commutative probability & stochastic processes.

Secretary/Local Organizer: Stephen Bartlett.

Organizing Committee: Howard Wiseman, Gerard Milburn, Andrew Doherty, Matthew James, Elanor Huntington, and Stephen Bartlett.

International Advisory Committee: Navin Khaneja, Hideo Mabuchi, Klaus Molmer, and Masahito Ueda.

Information: <http://www.physics.usyd.edu.au/quantum/PRACQSYS2007/>.

* 9–27 **Graduate Summer School: Probabilistic Models of Cognition: The Mathematics of Mind**, UCLA, Los Angeles, California.

Description: The goal is to develop a common mathematical framework for all aspects of cognition, and review how it explains empirical phenomena in the major areas of cognitive science—including vision, memory, reasoning, learning, planning, and language.

Speakers: Bernard Balleine (UCLA), Nick Chater (University College London), Patricia Cheng (UCLA), Nathaniel Daw (University College London), Peter Dayan (University College London), Craig Fox (UCLA), Stuart Geman (Brown University), Zoubin Ghahramani (University of Cambridge), Alison Gopnik (UC Berkeley), Tom Griffiths (UC Berkeley), Keith Holyoak (UCLA), Robert Jacobs (University of Rochester), Charles Kemp (Massachusetts Institute of Technology), Dan Kersten (University of Minnesota, Twin Cities), Konrad Koerding (Massachusetts Institute of Technology), Fei-Fei Li (Princeton University), Hongjing Lu (UCLA), Brian Milch (Massachusetts Institute of Technology), Stuart Russell (UC Berkeley), Ladan Shams (UCLA), Rich Shiffrin (Indiana University), Mark Steyvers (University of California, Irvine), Josh Tenenbaum (Massachusetts Institute of Technology), Colin Wilson (UCLA), Yingnian Wu (UCLA), Angela Yu (Princeton University), Alan Yuille (UCLA).

Application/Registration: Applications for funding for travel and housing will be accepted up until March 15, 2007. Applications received after that date will be considered if funds are still available. For the fullest consideration we urge you to apply as early as possible. You can apply for the entire three-week program, or just a part of it. Successful applicants will be notified as soon as funding decisions are made. Those who want to attend and are not applying for funding can simply register for the program. Both forms are available at <http://www.ipam.ucla.edu/programs/gss2007/>. Encouraging the careers of women and minority mathematicians

and scientists is an important component of IPAM's mission and we welcome their applications.

* 16–20 **Optimal Transportation, and Applications to Geophysics and Geometry**, University of Edinburgh, Edinburgh, Scotland.

Organizer: Interational Centre for Mathematical Sciences.

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

* 18–August 3 **X Diffiety School—School in Geometry of Partial Differential Equations**, Santo Stefano del Sole (AV), Italy.

Aim: The aim of the 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.

What is a Diffiety: 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 the unique natural language for quantum physics, just as the standard Calculus is the natural language for classical physics.

Scientific Director: Alexandre M. Vinogradov; email: school107ru@diffiety.ac.ru.

Information: Further information and how to apply can be found on the Diffiety Institute sites: <http://www.diffiety.ac.ru/>; <http://www.diffiety.org>.

* 22–August 4 **Biomedical Modeling and Cardiovascular-Respiratory Control: Theory and Practice**, Schloss Seggau, Leibnitz, (near Graz) Austria.

Description: To explore mathematical modeling techniques essential for studying human biomedical and clinical problems at primarily the organ and system level with an emphasis on control mechanisms and clinical problems arising from deficiencies in these control mechanisms. The event includes a 14-day summer school including 11 days of courses (July 22 to Aug. 1) after which the summer school participants attend a 3-day scientific workshop (Aug. 2 to Aug. 4) on the same scientific theme. The summer school course component is aimed primarily toward Ph.D. students and new Post-Docs. The three-day workshop will be a small scientific workshop which includes presentations from approximately 16 additional scientists actively involved in research in the focus theme of the school allowing school participants to apply what they have learned and meet current researchers. Teachers of the summer school and other auditors at the workshop may attend as well.

Organizers: Mostafa Bachar, Jerry Batzel, and Franz Kappel, Institute for Mathematics and Scientific Computing, University of Graz, Austria.

Information: http://www.uni-graz.at/mc_training_schools/graz/index.html.

* 23–27 **XVII Latinamerican Colloquium of Algebra**, Antioquia University, Medellin, Antioquia/Colombia.

Topics: Number theory, Combinatorics, Non-associative algebras and rings, Commutative algebra, Algebraic geometry, Hopf algebras and mathematical methods in physics representation theory, Homological algebra, Algebra and logic group theory, Applications of algebra to number theory.

Deadlines: Speakers: April 20, 2007. Participants: July 23, 2007. For participants and speakers to request financial aid for hotel, meals, and inscription: May 26, 2007.

Information: Participants and speakers and to request financial aid please contact one of the following: Hernan Giraldo, email: heragis.udea.edu.co; Faber Gomez, email: fabergomez75@hotmail.com; Omar Saldarriaga, email: saldarriagao@wpunj.edu. <http://altenua.udea.edu.co/~claxvii/> and for an En-

English version log in to <http://altenua.udea.edu.co/~claxvii/inglesindex.htm>.

- * 23–August 31 **Cemracs'07: Summer Mathematical Research Center on Scientific Computing and Its Applications**, CIRM, Luminy, France.

Description: This year's Cemracs is devoted to pre- and post-processing aspects of numerical simulation, including mesh generation and adaptation, error estimation, scientific visualisation, etc. It will consist of two consecutive events: A one-week summer school (July 23–July 30) and a five-week research center (July 30–August 31)

Topics: Cemracs'07 research center will host several research projects on the topics of applied mathematics and scientific computation, sponsored by industrial or public research funds. One or two young researchers (Ph.D. students) are invited to work on each project under the supervision and help of senior scientists. The projects will start during the summer school and last until the end of August.

Information: email: pppebay@sandia.gov.

- * 25–27 **Symbolic-Numeric Computation 2007 (SNC 2007)**, London, Canada.

Description: The goal of the present workshop is to support the interaction and integration of symbolic and numeric computing. SNC 2007 is affiliated with the 2007 International Symposium on Symbolic and Algebraic Computation (ISSAC 2007). Co-located with this workshop will be PASCO 2007, the 2007 International Workshop on Parallel Symbolic Computation. SNC and PASCO will be held immediately prior to the ISSAC 2007 meeting, both at the University of Western Ontario, Canada. ISSAC 2007 will be held nearby in Waterloo, Canada.

Information: <http://www.orcca.on.ca/conferences/snc2007/>.

- * 29–August 4 **Reconnect Conference 2007**, DyDAn Center, Rutgers University, Piscataway, New Jersey.

Description: Reconnecting teaching faculty to the mathematical sciences enterprise and exposing researchers in government and industry to relevant current research. The DyDAn Summer Reconnect Conferences will expose faculty teaching undergraduates to the role of the mathematical sciences in homeland security by introducing them to a current research topic that will be relevant for classroom presentation. The conferences also offer researchers in government or industry the opportunity to learn about recent techniques in emerging application areas relevant to homeland security. These workshops offer the opportunity for junior faculty as well as mid-level and senior faculty, and government and industry professionals to explore research questions in a new area of the mathematical sciences. Anyone may apply. Preference will be given to faculty whose primary job is undergraduate teaching and those working at government labs. Two-year college faculty are welcome to apply. Faculty from groups under-represented in mathematics are also encouraged to apply.

Topic: Data Analysis in Law Enforcement and Homeland Security.

Principal Speaker: William M. Pottenger, Rutgers University, billp@dimacs.rutgers.edu.

Conference Organizer: Fred S. Roberts, Rutgers University (froberts@dimacs.rutgers.edu).

Information: Contact Coordinator: reconnect@dimacs.rutgers.edu, or telephone at (732) 445-4304; or visit the website: <http://dydan.rutgers.edu/reconnect/>.

August 2007

- * 6–10 **Mathematical Virology**, Edinburgh, Scotland.

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

- * 12–17 **Geometry and Algebra of PDEs**, University of Tromsø, Norway.

Description: On the occasion of the 60th birthday of Valentin Lychagin.

Focus: Geometric and algebraic methods of investigations of PDEs for compatibility, solvability and integrability with applications to mathematical physics.

Organizers: Boris Kruglikov, Per Jakobsen.

Deadline: June 1, 2007.

Information: <http://www.math.uit.no/pdes2007/index.html>.

- * 13–17 **Groups, rings, Lie and Hopf algebras. II**, Bonne Bay Marine Station of Memorial University of Newfoundland, Norris Point, NL, Canada, A0K 3V0.

Description: Survey lectures and research talks on the topics in the title of the workshop.

Lectures by invitation: Antonio Giambruno (University of Palermo), Sergei Ivanov (University of Illinois - Urbana-Champaign), Eric Jespers (University of Brussels), Erhard Neher (University of Ottawa), Dmitri Nikshych (University of New Hampshire), Sudarshan Sehgal (University of Alberta), Vera Serganova (University of California - Berkeley).

Information: email: aac@math.mun.ca.

- * 15–18 **International Conference on Integral Geometry, Harmonic Analysis and Representation Theory in honor of Sigurdur Helgason on the occasion of his 80th birthday**, University of Iceland, Reykjavik, Iceland.

Topics: Harmonic analysis on symmetric spaces, The Radon transform and generalizations, the heat equation on symmetric spaces, representation theory, complex and algebraic methods in harmonic analysis and representation theory.

Speakers: Jean-Phillipe Anker, Erik van den Ban, Leticia Barchini, Jacques Faraut, Mogens Flensted-Jensen, Fulton Gonzales, Simon Gindikin, Sigurdur Helgason, Toshiyuki Kobayashi, Adam Koranyi, Bent Orsted, Gestur Olafsson, Eric Opdam, Toshio Oshima, Angela Pasquale, Todd Quinto, Francois Rouviere, Henrik Schlichtkrull, Robert Stanton, Gudlaugur Thorbergsson, David Vogan, Nolan Wallach, Joseph Wolf.

Deadline: Registration: June 30, 2007.

Information: <http://www.raunvis.hi.is/Helgason/>; email: HelgasonConference@raunvis.hi.is.

- * 27–29 **Automata 2007: 13th International Workshop on Cellular Automata**, The Fields Institute for Research in Mathematical Science, Toronto, Canada.

Organizers: Anna T. Lawniczak (University of Guelph) and Henryk Fuks (Brock University).

Program: The workshop will revolve around all important theoretical and applied aspects of cellular automata (CA) and discrete complex systems.

Invited Speakers: Ramon Alonso-Sanz (Polytechnic Univ. of Madrid, Spain), Stefania Bandini (Univ. of Milano-Bicocca, Italy), Franco Bagnoli (Univ. of Florence Italy), Bastien Chopard (Univ. of Geneva, Switzerland), Andreas Deutsch (Tech. Univ. Dresden, Germany), Samira El Yacoubi (Univ. of Perpignan, France), Nazim Fates (LORIA Univ. Nancy 1, France), Katsunobu Imai (Hiroshima Univ., Japan), Raymond Kapral (Univ. of Toronto, Canada), Petr Kurka (Charles Univ. Prague, Czech Republic), Maria Elena Lárraga (UAEM, Mexico), Pietro Liò (Univ. of Cambridge, UK), Danuta Makowiec (Univ. of Gdansk, Poland), Armin Mikler (Univ. of North Texas, USA), Angelo B. Mingarelli (Carleton Univ., Canada), Kenichi Morita (Hiroshima Univ., Japan), Henning S. Mortveit (Virginia Tech., USA), Pedro P.B. de Oliveira (Univ. Presbiteriana Mackenzie, Brasil), Marcus Pivato (Trent Univ., Canada), Raul Rechtman S (UNAM, Mexico), Peter Sloot (Univ. of Amsterdam, The Netherlands), Gianluca Tempesti (Univ. of York, UK), Burton Voorhees (Athabasca Univ., Canada), Gabriel A. Wainer (Carleton Univ., Canada) Jain Yuan (Tsinghuan Univ., Beijing, China).

Deadlines: May 30, 2007: Reduced fee registration ends June 1, 2007: Regular fee registration starts July 15, 2007: Abstract

submission deadline August 27, 2007: On site registration with higher fee.

Information: <http://www.fields.utoronto.ca/programs/scientific/07-08/automata07/>.

*27-31 **LMS workshop on motives, quadratic forms and algebraic groups**, Queen's University, Belfast, United Kingdom.

Description: The workshop is planned to bring together experts, young and old, on various aspects of research in Chow motives, quadratic forms and algebraic groups, as well as graduate students, postdocs and others who wish to learn about the subject areas.

Courses: N. Karpenko (Jussieu), Motives and quadratic forms; B. Totaro (Cambridge), Quadrics and Birational Geometry; C. Weibel (Rutgers), Motivic Cohomology.

Speakers and Invited Participants: A. Bak (Bielefeld), E. Bayer-Fluckiger (Lausanne), R. de Jeu (Durham), D. Hoffmann (Nottingham), M. Karoubi (Paris 7), B. Koeck (Southampton), D. Lewis (Dublin), J.-P. Tignol (Louvain-la Neuve), N. Vavilov (St. Petersburg), A. Vishik (Moscow), A. Wadsworth (UC San Diego), K. Zainoulline (Muenchen).

Sponsor: London Math. Society.

Information: <http://queensworkshop.googlepages.com/>.

September 2007

*3-7 **Conference in Numerical Analysis 2007 (NumAn 2007): Recent Approaches To Numerical Analysis: Theory, Methods and Applications**, Kalamata, Greece.

Overview: NumAn provides an opportunity to learn of new developments and to present original research results in all areas of Numerical Analysis such as Theory, Methods and Applications.

Call for Papers: Further information is available at: http://www.elsevier.com/wps/find/journaldescription.cws_home/505613/authorinstructions/. To submit a paper, send an email to: numan2007@math.upatras.gr.

Important Dates: Submission of abstracts: March 31, 2007. Notification of acceptance: April 30, 2007. Full versions of the accepted presentations to be included in the Proceedings of the Conference: May 31, 2007.

Financial Support: Some financial support will be available from the conference, to cover expenses of graduate students and post-doctoral fellows. Applications should be sent electronically to the conference e-mail address: numan2007@math.upatras.gr.

Information: Contact: email: numan2007@math.upatras.gr; <http://www.math.upatras.gr/numan2007/>.

*3-7 **The Riemann-Hilbert Problem and Toeplitz Operators**, Heriot Watt University, Edinburgh, Scotland.

Organizer: International Centre for Mathematical Sciences.

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

*4-8 **Potential Theory and Stochastics**, Albac, Romania.

Dedicated: To the memory of Aurel Cornea.

Organizers: "Simion Stoilow" Institute of Mathematics of the Romanian Academy, University of Alba Iulia and University of Pitesti.

Main speakers: H. Aikawa (Hokkaido) [to be confirmed], D. Bakry (Toulouse), A. Bendikov (Wroclaw), H.-P. Blatt (Eichstaett), J. Bliedtner (Frankfurt), K. El Mabrouk (Monastir), S.-L. Eriksson (Tampere), D. Feyel (Evry), B. Fuglede (Copenhagen), M. Fukushima (Osaka), S. Gardiner (Dublin), J. Glover (Gainesville), K. GowriSankaran (Montreal), W. Hansen (Bielefeld), N. Jacob (Swensa), K. Janssen (Duesseldorf), K. Kuwae (Kumamoto), A. de La Pradelle (Paris), J. Lukes (Prague), T. Lyons (Oxford)[to be confirmed], Z.-M. Ma (Beijing), H. Maagli (Tunis), I. Netuka (Prague), M. Rao (Gainesville), M. Roeckner (Bielefeld), W. Stannat (Darmstadt), J. Vesely (Prague) [to be confirmed].

Information: <http://www.imar.ro/~purice/conferences/afis-albac.pdf>; email: lucian.beznea@imar.ro.

*10-11 **Journées Jean-Yves Girard, Conference in Honour of his 60th Birthday**, Institut Henri Poincaré, Paris, France.

Program: Through our choice of invited speakers, we hope to illustrate the wide range of scientific interests of Jean-Yves Girard over thirty-five years, from the complexity of proofs to quantum mechanics, from system F to the geometry of computation, from denotational semantics to Von Neumann algebras.

Organizers: Michele Abrusci (Roma III), Pierre-Louis Curien (CNRS - Paris 7, chair), Martin Hyland (Cambridge), Giuseppe Longo (ENS, Paris), Mitsu Okada (Keio Univ., Tokyo), Phil Scott (Univ. of Ottawa), Jacqueline Vauzeilles (Paris 13, co-chair).

Speakers: Patrick Dehornoy, Gerard Huet, Herman Jervell Yves Lafont, Olivier Laurent, Thierry Paul Peter Selinger, Glynn Winskel.

Information: <http://www-lipn.univ-paris13.fr/jyg60/>.

*10-December 14 **Mathematics of Knowledge and Search Engines (Long Program)**, UCLA, Los Angeles, California.

Scientific Overview: This long program at IPAM will be devoted to new mathematics and methodologies of knowledge engines: the mathematical procedures used to extract knowledge from large databases. While this includes topics related to search engines it is mainly devoted to the more general problem of finding features in a database or using defined features to search within a database.

Activities: There will be an active program of research activities, seminars and workshops throughout the period and core participants will be in residence at IPAM continuously for these fourteen weeks. The program will open with tutorials, and will be punctuated by four major workshops and a culminating workshop at UCLA's Lake Arrowhead Conference Center. Several distinguished senior researchers will be in residence for the entire period. Between the workshops there will be a program of activities involving the long-term and short-term participants, as well as visitors.

Application: Please apply online to request financial support to attend and participate for extended periods up to the entire length of the program. Applications for individual workshops are separate and will be posted on individual workshop home pages. For the fullest consideration we urge you to apply as early as possible but no later than August 1, 2007. Successful applicants will be notified as soon as funding decisions are made. We have funding to support the attendance of recent Ph.D.'s, graduate students, and researchers in the early stages of their career. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

Information: The application and more information is available at <http://www.ipam.ucla.edu/programs/se2007/>.

*11-14 **Fall 2007 Workshop for Young Researchers in Mathematical Biology (WYRMB)**, Columbus, Ohio.

Information: <http://www.mbi.ohio-state.edu/postdocworkshop/fwyrmb2007.html>

*17-21 **Manifolds with nonnegative sectional curvature**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to manifolds with nonnegative and positive curvature. Significant progress has been made recently following a program suggested by K. Grove that one should study this condition under the presence of a large isometry group. The workshop will consider various special cases, with significant time spent working on problems.

Organizers: Kristopher Tapp and Wolfgang Ziller.

Deadline: May 15, 2007.

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

*17-21 **SECURECOMM 2007: Third International Conference on Security and Privacy for Communication Networks**, Nice, France.

Information: For information regarding the conference, please visit: <http://www.securecomm.org/>.

* 20–22 **Finsler Geometry (Mathematics and Physics)**, Institut de Recherche Mathématique Avancée, Strasbourg, France.

Organizers: Athanase Papadopoulos and Vladimir Turaev.

Invited speakers: Yves Benoist (ENS Paris), Christian Duval (Marseille), Patrick Foulon (Strasbourg), Hubert Goenner (Goettingen), Vladimir Matveev (Jena), Gabriel Paternain (Cambridge), Jean-Baptiste Pomet (Sophia-Antipolis), Hans Bert Rademacher (Leipzig), Marc Troyanov (Lausanne), Constantin Vernicos (Neuchatel), Abdelghani Zeghib (ENS Lyon).

Information: email: papadopoulos@math.u-strasbg.fr.

* 24–29 **18th Congress of Unione Matematica Italiana**, Bari, Italy.

Information: email: segreteria@congressoumi2007.it; <http://www.congressoumi2007.it>.

November 2007

* 1–December 31 **Program on Bose-Einstein Condensation and Quantized Vortices in Superfluidity and Superconductivity**, Institute for Mathematical Sciences, Singapore, Singapore.

Topics: Review the most recent and advanced development in the research on Bose-Einstein condensation and quantized vortices in superfluidity and superconductivity, from experiment to theory, simulation and application; present the recently developed mathematical theories, including modeling, analysis and computational techniques, that are relevant to BEC and quantized vortices; discuss and compare different recently proposed scientific models for BEC, especially for BEC at finite temperatures, and fermion condensation; identify critical scientific issues in the understanding of BEC and quantized vortices and the difficulties that are common to both disciplines; accelerate the interaction of applied and computational mathematics with physics and materials science, and promote this highly interdisciplinary research that has emerging applications; develop and foster international collaborations in a new era of scientific research.

Organizing Committee: Weizhu Bao (National University of Singapore), Fanghua Lin (Courant Institute, New York University).

Information: For enquiries on scientific aspects of the program, please email Weizhu Bao at bao_weizhu@nus.edu.sg.

January 2008

* 14–18 **The uniform boundedness conjecture in arithmetic dynamics**, American Institute of Mathematics, Palo Alto, California.

Description: This workshop, sponsored by AIM and the NSF, will be devoted to arithmetic properties of preperiodic points for morphisms on projective space. The hope is to create new approaches to the study of arithmetic properties of periodic and preperiodic points for (quadratic) polynomials, for one-dimensional rational maps, and for projective morphisms of higher dimension. A specific goal of the workshop is to develop tools and a strategy for proving the first (highly) nontrivial case of the uniform boundedness conjecture in dynamics, namely for quadratic polynomials in one variable over \mathbb{Q} .

Organizers: Matthew Baker, Robert Benedetto, Liang-Chung Hsia, and Joseph H. Silverman.

Deadline: September 1, 2007.

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

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.

May 2008

* 18–21 **The 7th AIMS International Conference on Dynamical Systems, Differential Equations and Applications**, University of Texas at Arlington, Arlington, Texas.

Aims and Topics: Keeping the tradition of the AIMS conference series, the conference covers all major areas of analysis and dynamics, with emphases on theory, methods, application, modeling and computations.

Format: There will be plenary talks; 30-minute special session talks; 20-minute contributed talks; and poster sessions. If you are interested in proposing a special session, please contact Shouchuan Hu at General@aimSciences.org.

Organizing Committee: Jianzhong Su (Chair; AIMS2008@uta.edu), Jianping Zhu (Co-chair), Tuncay Aktosun, Gaik Ambartsoumian, Alain Bensoussan, Hristo V. Kojouharov, Cecelia Levings, Yue Liu, Peter Moore, Hua Shan.

Scientific Committee: Shouchuan Hu (Chair) Jerry Bona, Alberto Bressan, Adrian Constantin, Amadeu Delshams, Hiroshi Matano, Alain Miranville, Wei-Ming Ni, N.S. Papageorgiou, Jianzhong Su, Jianping Zhu. Coordinator: Xin Lu; lux@uncw.edu.

Deadline: February 29, 2008: For both submission of abstracts and early registration.

Information: <http://aimsciences.org/AIMS-Conference/2008/index.htm>.