
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/>.

September 2009

* 2–4 9th International Workshop on Differential Geometry and its Applications, Iasi University, Iasi, Romania.

Organizers and Information: The Institute of Mathematics of the Romanian Academy (Bucharest), the Alexandru Ioan Cuza University (Iasi), and the Institute of Mathematics of Iasi with the financial support of CNCSIS through the Exploratory Workshop program. Mihai Anastasiei (Iasi), email: anastas@uaic.ro; Radu Iordanescu (Bucharest), email: radu.iordanescu@imar.ro; Sergiu Moroianu (Bucharest), email: sergiu.moroianu@imar.ro. <http://www.imar.ro/~sergium/iasi09/Iasi.html>.

Invited Speakers: Dorin Andrica (Cluj-Napoca), Dan Burghilea (Columbus), Marius Buliga (Bucharest), Florin Damian (Chisinau), Liana David (Bucharest), Josef Dorfmeister (Munich), Graziano Gentili (Florence), Sylvain Golenia (Erlangen), Colin Guillarmou (Paris), Stefan Haller (Vienna), Wilhelm Kaup (Tübingen), Yuri Kordyukov (Ufa), Paul Loya (Binghamton), Stefano Marchiafava (Rome), Marian Munteanu (Iasi), Cezar Oniciuc (Iasi), Daniele Otera (Palermo), Jinsung Park (Seoul), Vladimir Slesar (Craiova), Laszlo Stacho (Szeged), Nicolae Teleman (Ancona).

2–4 Workshop in Nonlinear Elliptic PDEs, Université Libre de Bruxelles, Brussels, Belgium. (Feb. 2009, p. 310)

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

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

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

2–6 The 9th Balkan Conference on Operational Research (BALCOR 2009), Constanta, Romania. (Jun./Jul. 2009, p. 767)

Description: The University of Bucharest, Naval Academy Mircea cel Batran Constanta, The Romanian Academy, The Technical University of Civil Engineering Bucharest, are honored to invite everyone engaged in research, teaching, business, or public services related to Operational Research to attend. The general aim of the conference is to facilitate the exchange of scientific and technical information related to Operational Research and to promote international co-operation especially among the Balkan countries.

Information: <http://civile.utcb.ro/balcor/>.

3–5 Complex and Harmonic Analysis 2009, Archanes, Crete, Greece. (Jun./Jul. 2009, p. 767)

Description: At the Department of Mathematics of the University of Crete we are organizing a small meeting in the broad areas of Complex and Harmonic Analysis. The meeting will take place in the village of

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/>.

Archanes, 15km southeast of the city of Iraklio. We are hoping that a similar meeting will be taking place every two years alternating in Greece and Spain.

Invited Speakers: Dimitris Betsakos, Univ. of Thessaloniki; Oscar Blasco, Univ. de Valencia; Joaquim Bruna, Univ. Autònoma de Barcelona; Daniel Girela, Univ. de Malaga; Antonios Melas, Univ. of Athens; Vassilis Nestoridis, Univ. of Athens; Artur Nicolau*, Univ. Autònoma de Barcelona; Aristomenis Siskakis, Univ. of Thessaloniki; Dragan Vukotic, Univ. Autònoma de Madrid. * Beyond the invited speakers there will be some shorter contributed talks. Financial support: there will be some support for junior participants.

Information: <http://fourier.math.uoc.gr/ch2009>.

3-5 International Conference on Modern Mathematical Methods in Science and Technology (M3ST '09), Poros Image Hotel, Poros Island, Greece. (May 2009, p. 657)

Topics: Differential equations and mathematical models, numerical analysis, mathematics of computation, applications of mathematics in economy, stochastic analysis, modelling optimization, control theory, image and signal processing.

Invited Speakers: H. Ammari (CNRS, France), G. Bellettini (Roma, Tor Vergata, Italy), N. Bouleau (ENPC, France), G. Dassios (Patras, Greece), P. Imkeller (Humbolt University, Berlin, Germany), O. A. Karakashian (Tennessee, Knoxville, U.S.A.), L. Kirousis Patras, Greece), D. J. N. Limebeer (Imperial College, U.K.), F. Murat (Paris VI, France), E. M. Ouhabaz (Bordeaux, France), G. Papanicolaou (Stanford, U.S.A.), J.-C. Saut (Paris Sud 11, France), A. Tertikas (Heraklion, Crete, Greece), A. E. Tzavaras (Heraklion, Crete, Greece).

Information: <http://www.math.uoa.gr/M3ST09/index.html>.

3-6 International Conference on Theory and Applications in Mathematics and Informatics, "1 Decembrie 1918" University of Alba Iulia, Alba Iulia, Romania. (May 2009, p. 657)

Description: The aim of the conference is to bring together mathematicians and informaticians from all over the world and to attract original papers on the following topics: algebra, analysis and complex analysis, topology and geometry, differential equations, probability and statistics, applied mathematics, computer science, intelligence computation, product and process modelling, embedded systems, knowledge engineering, e-education.

Information: <http://www.uab.ro/ictami>.

4-9 2nd Dolomites Workshop on Constructive Approximation and Applications (DWCAA09), Alba di Canazei, Trento, Italy. (Jan. 2009, p. 73)

Description: DWCAA09 proposes 8 main invited lectures, 4 sessions of contributed talks and a poster session.

Keynote speakers: C. de Boer (Madison, USA); N. Dyn (Tel-Aviv, IL); G. Meurant (Paris, F); R. Schaback (Goettingen, D); I. H. Sloan (Sydney, AU); N. Trefethen (Oxford, UK); H. Wendland (Brighton, UK); Y. Xu (Eugene OR, USA).

Information: <http://www.math.unipd.it/~dwcaa09>; email: marcov@math.unipd.it.

5-10 9th Conference on Geometry and Applications, Hotel Joliot Curie, resort St. Constantine and Helena, Varna, Bulgaria. (Jun./Jul. 2009, p. 767)

Organizer: The Geometrical Society Bojan Petkanchin in Bulgaria.

Topics: The following fields are included: Differential geometry, finite groups and invident geometries, application of computer methods in geometry, algebra and analysis, school geometry.

Information: <http://www.fmi.uni-sofia.bg>.

7-8 CETL-MSOR Conference 2009, Open University, Milton Keynes, England. (Apr. 2009, p. 524)

Description: The Maths, Stats & OR Network will be running its fourth annual learning and teaching conference in conjunction with the related Centres of Excellence in Teaching and Learning (CETLs). The 2009 conference will be hosted by the Centre for Open Learning of Mathematics, Science, Computing and Technology (COLMST). The

aim of this conference is to promote, explore, and disseminate emerging good practice and research findings in mathematics and statistics support, teaching, learning, and assessment.

Information: <http://mathstore.ac.uk/index.php?pid=253>.

7-10 A Harmonic Map Fest, University of Cagliari, Italy. (Jun./Jul. 2009, p. 767)

Description: This conference is in honour of Prof. John C. Wood, on the occasion of his 60th birthday and 35 years of involvement in harmonic maps. While the scientific content will undoubtedly reflect J. C. Wood's predilection for harmonic maps and harmonic morphisms and be a good opportunity to review the state of the art, other topics in Differential Geometry will be most welcome.

Main speakers: P. Baird (Brest), F. Burstall (Bath), S. Dragomir (Potenza), F. Helein (Paris), D. Kotschick (Munich), E. Musso (Aquila), Y. Ohnita (Osaka), L. Ornea (Bucharest), F. Pedit (Tuebingen and Amherst), M. Rigoli (Milan) and H. Urakawa (Tohoku). There will also be some 30 minute talks.

Information: <http://www.matematik.lu.se/JCW-60/>.

7-11 Third International Conference on Geometry and Quantization GEOQUANT, Mathematics Research Unit, University of Luxembourg, Luxembourg. (Apr. 2009, p. 524)

Topics: The scientific program of the conference is concentrated around the following main topics: algebraic-geometric and complex-analytic-geometric aspects of quantization; geometric quantization and moduli space problems; asymptotic geometric analysis; infinite-dimensional geometry; relations with modern theoretical physics.

Speakers (preliminary list): Andersen, Jorgen, Aarhus (TBC); Charles, Laurent, Paris; Domrin, Andrei, Moscow; Englis, Mirek, Prague; Foth, Tatyana, Western Ontario; Fujita, Hajime, Tokyo; Gorodentsev, Alexey, Moscow; Huebschmann, Johannes, Lille; Kaledin, Dmitry, Moscow (TBC); Karabegov, Alexander, Abilene; Kobayashi, Ryoishi, Nagoya; Mano, Toshiyuki, Kyoto; Marinescu, George, K[^]In; Natanzon, Sergey, Moscow; Nohara, Yuichi, Nagoya; Osipov, Denis, Moscow; Paoletti, Robert, Milano; Talalaev, Dmitry, Moscow; Tate, Tatsuja, Nagoya; Trechev, Dmitry, Moscow; Tyurin, Nikolai, Dubna; Ueno, Kenji, Kyoto; Upmeyer, Harald, Marburg; Zhang, Weiping, Nankai, China.

Information: <http://math.uni.lu/geoquant>.

7-11 XX1st Rolf Nevanlinna Colloquium, Kyoto University, Kyoto, Japan. (Jun./Jul. 2009, p. 767)

Information: To join the mailing list for further information, please send an empty mail to: join@nevanlinna.jp; Contact address: <http://www.nevanlinna.jp>.

7-12 Advanced School on Homotopy Theory and Algebraic Geometry, Mathematical Research Institute, University of Sevilla (IMUS), Sevilla, Spain. (May 2009, p. 657)

Description: The school is addressed to Ph.D. students and young post-doc researchers working on Algebraic Geometry and related areas. There will be three main minicourses: (1) Derived Algebraic Geometry. (2) Model Categories and Derivators. (3) Cartan-Eilenberg Categories and Descent Categories.

Speakers: Francisco Guillén Santos, University of Barcelona; Bernhard Keller and Georges Maltsiniotis, University of Paris 7; Vicente Navarro Aznar, University of Barcelona; Beatriz Rodríguez González, CSIC-Madrid; Bertrand Toën and Michel Vaquié, University of Toulouse; Gabriele Vezzosi, University of Bologna.

Information: <http://congreso.us.es/htag09>.

* **8-10 International Conference on Mathematics and Informatics ICMI 2 (2009)**, Faculty of Science (Department of Mathematics and Computer Science), University of Bacau, Bacau, Romania. (Aug. 2009, p. 862)

Description: The aim of the conference is to bring together mathematicians and computer scientists from all over the world and to attract original papers on the following topics: Algebra, Analysis and Complex Analysis, Topology and Geometry, Differential Equations, Probability and Statistics, Applied Mathematics, Theoretical Computer Science,

Artificial Intelligence, Software Systems, Knowledge Engineering, E-Education. The Scientific Programme of the conference will consist of invited 30-minute plenary lectures and contributed 15-minute papers on the related topics.

Information: <http://www.stiinte.ub.ro/cercetare/c-conferinte/103>; email: mihaitalmaciu@yahoo.com.

8-12 **IV International Conference on Mathematical Analysis in Andalusia**, University of Cadiz, Jerez de la Frontera, Spain. (May 2009, p. 657)

Description: This edition will be dedicated to the memory of Professor Antonio Aizpuru Tomas, full professor in Mathematical Analysis of Cadiz University, who suddenly passed away on May 1, 2008. He was mainly responsible for the development of the studies of mathematics in Cadiz and in the research activities on functional analysis in this university. He was also a beloved person and friend. We kindly invite you to participate in this scientific event which we hope will be of interest to you.

Information: <http://cidama.uca.es>.

8-December 11 **Long Program: Combinatorics: Methods and Applications in Mathematics and Computer Science**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2009, p. 73)

Overview: Combinatorics studies discrete objects and their properties. This program will focus specifically on several major research topics in modern Discrete Mathematics and puts an emphasis on the exchange of ideas, approaches and techniques between various areas of Discrete Mathematics and Computer Science and on the identification of new tools from other areas of mathematics which can be used to solve combinatorial problems.

Organizing Committee: Noga Alon, Gil Kalai, Janos Pach, Vera Sos, Angelika Steger, Benjamin Sudakov, Terence Tao.

Application/Registration: An application and registration form is available at <http://www.ipam.ucla.edu/programs/cma2009>. Applications received by July 27, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cma2009/>; email: sbeggs@ipam.ucla.edu.

9-16 **Combinatorics: Methods and Applications in Mathematics and Computer Science, Tutorials**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2009, p. 73)

Overview: Tutorials provide an introduction to several major research topics in modern discrete mathematics, including probabilistic methods, extremal problems for graphs and set systems, Ramsey theory, additive number theory, combinatorial geometry, discrete harmonic analysis and more.

Goal: The goal is to familiarize the prospective participants with the techniques which were developed in combinatorics in the last few decades. Registration for tutorials is free.

Organizing Committee: Noga Alon, Gil Kalai, Janos Pach, Vera Sos, Angelika Steger, Benjamin Sudakov, Terence Tao.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmatut>. Applications received by July 29, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

10-12 **Quantum topology and Chern-Simons theory**, Institut de Recherche Mathématique Avancée, Université de Strasbourg, 7 rue René Descartes, Strasbourg, France. (Jan. 2009, p. 73)

Description: The meeting is No. 84 in the series "Encounter Between Mathematicians and Theoretical Physicists". The focus is on quantum

topology and Chern-Simons theory. There will be survey lectures and specialized talks.

Invited speakers: A. Alekseev (Geneva), J. E. Andersen (Aarhus), F. Costantino (Strasbourg), V. Fock (Strasbourg), S. Garoufalidis (Georgia Tech), R. Kashaev (Geneva), G. Masbaum (Paris 7), K. Noui (Tours), N. Reshetikhin (Amsterdam), B. Schroers (Edinburgh), Teschner (Hamburg), G. Thompson (Trieste).

Organization and information: Gwenael Massuyeau and Athanase Papadopoulos; email: massuyea@math.u-strasbg.fr; papadopoulos@math.u-strasbg.fr.

Information: <http://www-irma.u-strasbg.fr/article744.html>; email: papadopoulos@math.u-strasbg.fr.

11-13 **Algebra and Topology in Interaction**, University of California, Davis, California. (May 2009, p. 657)

Description: In honor of Professor Dmitry Fuchs' 70th Anniversary. **Theme:** The main theme of the conference is the interplay of algebra and topology over the past 40 years, since the birth of Gelfand Fuchs cohomology.

Topics: Include current exciting developments in symplectic field theory, representations of infinite dimensional Lie algebras, topological quantum field theory, topological applications of cohomology of infinite dimensional Lie algebras, characteristic classes of foliations, contact homology, Chekanov Eliashberg differential graded algebra, and Legendrian knot theory.

List of speakers: B. Feigin, E. Frenkel, S. Gindikin, A. Givental, M. Khovanov, A. Kirillov, S. Novikov, V. Retakh, C. Roger, G. Segal, S. Tabachnikov, and O. Viro. Mathematicians at all levels are invited to attend. An important goal of the conference is to provide an opportunity for a diverse group of mathematicians including postdoctoral researchers, those with traditionally underrepresented background, graduate students, and faculty from primary undergraduate institutions, to meet and discuss mathematics with the invited leading experts of the field.

Deadline: Those interested in receiving funding for travel should apply by July 31, 2009. This conference is supported by the NSF, MSRI, and UC Davis.

Information: email: cdani@math.ucdavis.edu; <http://www.math.ucdavis.edu/research/algetopcon>.

11-17 (NEW DATE) **Models in Developing Mathematics Education**, Dresden University of Applied Sciences, Dresden, Germany. (Apr. 2007, p. 498)

Description: 10th International Conference of The Mathematics Education into the 21st Century Project Our project was founded in 1986 and is dedicated to the planning, writing and disseminating of innovative ideas and materials in Mathematics and Statistics Education.

Program: Papers are invited on all innovative aspects of mathematics education. There will be an additional social programme for accompanying persons. Our conferences are renowned for their friendly and productive working atmosphere. They are attended by innovative teachers and mathematics educators from all over the world, 25 countries were represented at our last conference for example!

Information: email: alan@rogerson.pol.pl.

14-18 **2009 Workshop on Algebraic Geometry and Physics: Representations, Lie Theory and Physics**, Maresias Beach Hotel, Maresias, Brazil. (Jun./Jul. 2009, p. 767)

Description: The workshop will bring together mathematicians and physicists working on several aspects of Lie theory (Lie groups, Lie algebras, algebraic groups, representations) and their applications (including gauge theory, deformation theory, automorphic representations, partial differential equations, integrable systems, symmetries in physics, among others). The programme will include minicourses by A. Kleshchev, D. E. Diaconescu, R. Donagi, and about 15 one-hour talks by invited speakers. It is possible to submit a proposal of a communication; please send a title and a short abstract. Inclusion into the programme will be decided by the scientific committee. If you are in-

terested in participating, please write to: jardim@ime.unicamp.br, futorny@ime.usp.br or henrique@impa.br by April 30, 2009.

Information: <http://people.sissa.it/~bruzzo/wagp09/index.htm>.

* 14-18 **Conference on Probabilistic Techniques in Computer Science**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: Probabilistic Techniques in Computer Science constitutes a well developed and very active area of research that combines Theoretical Computer Science, Discrete Mathematics, Probability Theory, and Combinatorics. The main goal of the conference is to gather a large number of world-renowned experts and young researchers of the area for the dissemination of novel results, exchange of scientific ideas among the participants, and cross-fertilization between the different subareas of probabilistic techniques in computer science.

Information: <http://www.crm.cat/ccomputer>.

14-18 **IMA Workshop: Flowing Complex Fluids: Rheological Measurements and Constitutive Modeling**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 524)

Description: Fluids with nontrivial small-scale inhomogeneities (microstructure) include suspensions, emulsions, foams, polymer melts and solutions, surfactant solutions and liquid crystals. Flows of these complex fluids display features that are not found in simple fluids, including interfacial and bulk instabilities, texture formation and evolution and other novel flow phenomena that all can be traced back to the influence the fluid microstructure has on the stresses that develop within the flow. This workshop will focus on the experimental motivation and the constitutive modeling of complex fluids at all scales. Topics to be discussed include modeling from microscopic to mesoscopic to macroscopic, closures, constitutive model predictions including shear thinning and thickening regimes, inhomogeneities in flow including transient and steady state shearbanding, and shear induced phase transitions.

Information: <http://www.ima.umn.edu/2009-2010/W9.14-18.09/>.

* 14-18 **MSRI Upcoming Workshops: Black Holes in Relativity**, Mathematical Sciences Research Institute, Berkeley, California.

Organizers: Mihalis Dafermos (University of Cambridge) and Igor Rodnianski (Princeton).

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

14-19 **Dictionary of Atoms: New Trends in Advanced Signal Processing in Functional Brain Imaging**, Centre de recherches mathématiques, Université de Montréal, Montréal, Québec, Canada. (Jun./Jul. 2009, p. 768)

Description: During the last decade, sparse representations of signals have been intensively studied in the domain of functional brain imaging and electrophysiology. This workshop will present various aspects of this “wavelet heritage” in this domain of signal processing, applied in fMRI and electrophysiological signals. Analysis of signals and inverse problems in sparse representations will be highly focussed during the week.

Information: http://www.crm.umontreal.ca/Atoms09/index_e.php.

15-18 **Bogolyubov Kyiv Conference: “Modern Problems of Theoretical and Mathematical Physics”**, Bogolyubov Institute for Theoretical Physics, Kyiv, Ukraine. (Nov. 2008, p. 1319)

Description: The National Academy of Sciences of Ukraine, the Bogolyubov Institute for Theoretical Physics and the Institute of Mathematics organize the Bogolyubov Kyiv Conference: “Modern Problems of Theoretical and Mathematical Physics” on the occasion of the 100th anniversary of Nikolai Bogolyubov.

Topics: Mathematical methods in theoretical physics, Particles and quantum field theory, Statistical physics and kinetic theory, Nuclei theory and nuclear reactions, Solid-state theory.

Information: <http://www.bitp.kiev.ua/bogolyubov2009/>; email: bogolyubov2009@bitp.kiev.ua.

* 17-19 **The 5th William Rowan Hamilton Geometry and Topology Workshop on Computational and Algorithmic Geometry**, The Hamilton Mathematics Institute, Trinity College, Dublin, Ireland.

Description: A workshop on Computational and Algorithmic Geometry.

Information: Sponsored by Boston College, and the HMI; <http://www.hamilton.tcd.ie/events/gt/gt2009.htm>.

21-25 **Convex algebraic geometry, optimization and applications**, American Institute of Mathematics, Palo Alto, California. (Apr. 2009, p. 524)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to the study of “Convex Algebraic Geometry” and some of its numerous applications.

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

* 24-25 **4th International Workshop on Data Privacy Management (DPM09)**, Co-located with ESORICS 2009, Saint Malo, Brittany, France.

Description: DPM 2009 Workshop aims at discussing and exchanging ideas related to privacy data management. We invite papers from researchers and practitioners working in privacy, security, trustworthy data systems and related areas to submit their original papers in this workshop.

Information: For more information, please see: <http://dpm09.dyndns.org/>.

24-26 **Variational and Topological Methods in Nonlinear Analysis**, University of Texas at San Antonio (UTSA). (Jun./Jul. 2009, p. 768)

Description: International conference dedicated to the 60th birthday of Vieri Benci.

Information: <http://www.dm.uniba.it/nonlinear09/>.

24-30 **6th International Conference on Functional Analysis and Approximation Theory -FAAT 2009**, Acquafredda di Maratea, Italy. (Apr. 2009, p. 525)

Description: The meeting will be devoted to some significant aspects of contemporary mathematical research on functional analysis, operator theory and approximation theory including the applications of these fields in other areas such as partial differential equations, integral equations, numerical analysis. It is expected that the Proceedings of the Conference will be published.

Plenary speakers: J. Appell (Würzburg), G. Godefroy (Paris), N. Jacob (Swansea), M. Kato (Kitakyushu), L. Maligranda (Lulea), F. Marcellan (Madrid), G. Milovanovic (Serbia), G. Monegato (Torino), B. de Pagter (Delft), L.E. Persson (Lulea), D. Potts (Chemnitz), I. Raaij (Cluj-Napoca), B. Silberman (Chemnitz), V. Totik (Szeged), J. Szabados (Budapest), P. Vertesi (Budapest).

Organizing Committee: F. Altomare, A. Attalienti, M. Campiti, M. Cappelletti Montano, L. D’Ambrosio, M. C. De Bonis, S. Diomedede, V. Leonessa, G. Mastroianni, D. Occorsio, M. G. Russo.

Information: <http://www.dm.uniba.it/faat2009>; email: faat2009@dm.uniba.it.

27-29 **Symposium on Engineered & Natural Complex Systems**, Toronto, Ontario, Canada. (May 2009, p. 658)

Topics: Include, but are not limited to, the following: Structure, function and dynamics of complex systems, i.e. data communication networks, cyberspace, transportation networks, organizational networks, power grids, biological, physical, social, ecological, epidemiological and other complex systems & networks; Emergence, multiscale phenomena, self-organization, self-similarity, long range dependence, phase transition, pattern formation, synchronization, robustness, reliability, fragility, interdependence, cooperation, adaptation, evolution; Analysis & control techniques of dynamics & performance, mean field & information theory of complex systems & networks; Cellular

automata, agent based & individually based and other models of complex systems & networks and their simulations.

Information: http://toronto.ieee.ca/tic-sth2009/cfps/IEEE_TIC-STH09_CFP-ENS.pdf.

October 2009

* 1-2 **Finitely Presented Groups: Where Do We Go From Here**, The City College of New York/CUNY, New York, New York.

Description: Senior mathematicians will join early-career researchers to discuss new directions of study, research and investigation of finitely presented groups. The conference aims to disseminate the most current research in group theory, engender an active interest among newer researchers, and point the way to possible new developments.

Sponsored: National Science Foundation and The City College of New York/CUNY.

Speakers: Gilbert Baumslag and Alexei Miasnikov will lecture on the first day, primarily to graduate and postdoctoral students. The plenary session on the second day will be addressed by Mladen Bestvina, Jim Cannon, Peter Kropholler, Zlil Sela and Bill Thurston.

Information: Registration and participation are free, and some funding is available. Olga Mikhlinina at omikhlinina@cs.cuny.cuny.edu; <http://rio.sci.ccnycuny.edu/caissny.org/events-1/GroupsConference>.

* 2-3 **Ninth Annual Prairie Analysis Seminar**, Kansas State University, Manhattan, Kansas.

Description: Emmanuele DiBenedetto, Vanderbilt University, will give two one-hour talks. Ugo Gianazza of the University of Pavia and Vincenzo Vespri of the University of Florence will each give a one-hour talk. There is time scheduled for contributed talks; all participants, especially mathematicians early in their careers, are encouraged to contribute a 20-minute talk.

Organizers: Marianne Korten, Charles Moore, Kansas State University; and Estela Gavosto, Rodolfo Torres, University of Kansas.

Information: Some support for travel is available. The organizers have applied for further support.

* 2-3 **"Why Knot?: A Knot Theory Workshop"**, University of Central Oklahoma, Edmond, Oklahoma.

Description: This is a workshop for undergraduates that introduces the fascinating mathematics of knots. Knot theory is particularly exciting as there are lots of pictures and open problems can be discussed without the need for much background. The lecturer for the workshop will be Colin Adams, author of the highly praised "The Knot Book". Dr. Adams is the author of numerous research articles on knot theory and the recipient of a 1998 MAA Haimo Distinguished Teaching Award. He is widely recognized as an expositor of mathematics and is notorious for giving mathematical lectures in the guise of sleazy real estate agent Mel Slugbate. This workshop is funded by the NSF and limited travel funds are available to deter the expenses of participants. Women, minorities, and persons with disabilities are especially encouraged to participate and to apply for support.

Information: Contact Charlotte Simmons at cksimmons@uco.edu.

5-8 **2009 SIAM/ACM Joint Conference on Geometric Design and Solid & Physical Modeling**, Hilton San Francisco Financial District, San Francisco, California. (Dec. 2008, p. 1451)

Description: The 2009 Joint Conference on Geometric and Solid & Physical Modeling seeks high quality, original research contributions that strive to advance all aspects of geometric and physical modeling, and their application in design, analysis and manufacturing, as well as in biomedical, geophysical, digital entertainment, and other areas. A shared objective of both the SIAM GD and ACM SPM communities is a desire to highlight work of the highest quality on the problems of greatest relevance to industry and science.

Information: <http://www.siam.org/meetings/gdspm09/>.

5-9 **Combinatorics: Probabilistic Techniques and Applications**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Dec. 2008, p. 1451)

Description: The probabilistic approach has been successful in combinatorics, graph theory, combinatorial number theory, optimization and theoretical computer science. This workshop will focus on several main research directions of probabilistic combinatorics, including the application of probability to solve combinatorial problems, the study of random combinatorial objects and the investigation of randomized algorithms.

Organizing Committee: Alan Frieze, Nathan (Nati) Linial, Angelika Steger, Benjamin Sudakov, Prasad Tetali.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmaws1>. Applications received by August 24, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cmaws1/>; email: sbeggs@ipam.ucla.edu.

* 5-9 **Frobenius Lifts**, Lorentz Center, Leiden, The Netherlands. (Aug. 2009, p. 862)

Description: A workshop on the role of commuting Frobenius lifts in arithmetic algebraic geometry. Important roles are played by schemes of Witt vectors, arithmetic jet spaces, and the spectra of lambda-rings. There will be four expository lecture series: Pierre Cartier (IHES): Lambda-rings and Witt vectors; Lars Hesselholt (Nagoya): The de Rham-Witt complex; Alexandru Buium (Albuquerque): Arithmetic differential equations; James Borger (Canberra): Lambda-algebraic geometry. There will also be a number of individual talks about relations with nearby fields. We welcome workers and students in all fields of number theory and algebraic geometry. Some monetary support is available to Ph.D. students and postdocs.

Information: <http://www.lorentzcenter.nl/lc/web/2009/342/info.php3?wsid=342>.

5-9 **International Conference "Kolmogorov readings. General control problems and their applications (GCP-2009)"**, Tambov State University named after G.R. Derzhavin, Institute of Mathematics, Physics, and Computer sciences, Tambov, Russia. (May 2009, p. 658)

Description: The conference is the 4th one in the series "Kolmogorov readings" gathering international scientists in the city where the outstanding mathematician, A.N. Kolmogorov, was born. Traditionally the conference will mainly focus on general control problems and their applications in natural and human sciences, optimization theory, differential equations and inclusions. There are planned plenary (40 min.) and sectional (20 min.) talks, as well as a school on optimal control aimed to Ph.D students and young researchers.

Information: <http://www.tambovopu2009.narod.ru/>.

5-9 **Rational curves and A^1 -homotopy theory**, American Institute of Mathematics, Palo Alto, California. (Jun./Jul. 2009, p. 768)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to studying recent interactions between rational connectivity and the newly developing theory of A^1 -algebraic topology.

Information: <http://aimath.org/ARCC/workshops/a1homotopy.html>.

* 8-11 **The International Conference of Differential Geometry and Dynamical Systems (DGDS-2009)**, University Politehnica of Bucharest, Bucharest, Romania.

Description: The Conference main topics are: 1. Applications of Riemannian and Finsler-Lagrange-Hamilton structures; 2. Dynamical systems and jet space theory; 3. Multitime evolutions and optimal control problems; 4. Magnetic dynamical systems; antennas theory; 5. Mathematical models in Physics and in Engineering; 6. Mathemati-

cal statistics; 7. Chaos and fractals. Graduate students and postdocs interested in these rapidly developing fields are warmly welcome.

Information: <http://www.mathem.pub.ro>.

9-11 **SIAM Conference on Mathematics for Industry: Challenges and Frontiers (MI09)**, Hilton San Francisco Financial District, San Francisco, California. (Feb. 2009, p. 310)

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

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

9-11 **Southeastern Lie Theory Workshop on Combinatorial Lie Theory and Applications**, North Carolina State University, Raleigh, North Carolina. (Jun./Jul. 2009, p. 768)

Description: The main focus of this workshop will be on combinatorial representation theory, both algebraic and geometric. Professor Masaki Kashiwara will give a series of three lectures at this workshop. This is the first of three annual workshops on Lie Theory to be held in the southeastern region of USA, funded by the National Science Foundation; organized by Kailash Misra (email: misra@math.ncsu.edu), Daniel Nakano, and Brian Parshall. Partial support would be available to junior researchers and graduate students. Please see the conference web page for further details. Priority for funding will be given to applicants from minority and underrepresented groups.

Information: <http://www.math.virginia.edu/lieworkshops/>.

12-14 **The 6th annual International New Exploratory Technologies Conference (NEXT 2009)**, Fudan University, Shanghai, China. (May 2009, p. 658)

Description: This year's NEXT focuses on four special themes: Productization and Commercialization, Productization of Embedded Software in Products and Services, Renewable Energy Technology, and Exploratory Materials and Technology.

Organizers: Fudan university and University of Turku.

Information: <http://next.utu.fi/2009>.

12-16 **Algebra, Geometry, and Mathematical Physics**, The Bedlewo Mathematical Research and Conference Center, Bedlewo, Poland. (Dec. 2008, p. 1451)

Description: Contemporary hot trends in algebra, geometry, and mathematical physics.

Organizing Committee: V. Abramov, J. Fuchs, J. Grabowski, E. Paal (Vice-Chair), A. Stolin, A. Tralle (Chair), P. Urbanski.

Information: <http://www.agmf.astralgo.eu/bd109/>.

* 12-16 **Asymptotics in Dynamics, Geometry and PDEs; Generalized Borel Summation**, CRM Ennio de Giorgi, Pisa, Italy.

Description: A one-week international conference centered on asymptotic analysis and its applications to dynamics, geometry, physics, etc., putting emphasis on the theories developed by Jean Ecalle.

Scientific Themes: Local analytic dynamics. Small denominator problems. Divergent series, transseries, summability theories. Resurgent functions, alien calculus, mould calculus. Analytic PDEs. Classification of singular geometric structures. Applications to semi-classical quantum mechanics and perturbative Quantum Field Theory.

Scientific Committee: L. Boutet de Monvel (Univ. Paris 6), D. Cerveau (Univ. Rennes 1), T. Kawai (Kyoto Univ.), S. Marmi (SNS Pisa).

Information: <http://www.crm.sns.it/cgi-bin/pagina.pl?Id=117&Tipo=evento&Sezione=Aims>.

12-16 **IMA Workshop: Flowing Complex Fluids: Fluid Mechanics-Interaction of Microstructure and Flow**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 524)

Description: Fluids with nontrivial small-scale inhomogeneities (microstructure) include suspensions, emulsions, foams, polymer melts and solutions, surfactant solutions and liquid crystals. Flows of these complex fluids display features that are not found in simple fluids, including interfacial and bulk instabilities, texture formation and evolution and other novel flow phenomena that all can be traced back to the influence the fluid microstructure has on the stresses that develop within the flow. This workshop focuses on these fluid mechanical phenomena and their origins in the complex nature of the fluid. Topics include free surface flows and extensional rheometry, instabilities and flow induced phase transitions, turbulence and drag reduction in polymer and surfactant solutions, coating and extrusion, some microfluidic flows of complex fluids, and multiscale computational methods.

Information: <http://www.ima.umn.edu/2009-2010/W10.12-16.09/>.

* 12-16 **MSRI Upcoming Workshops: Tropical Geometry in Combinatorics and Algebra**, Mathematical Sciences Research Institute, Berkeley, California.

Organizers: Federico Ardila (San Francisco State University), David Speyer (MIT), Jenia Tevelev (U. Mass Amherst), Lauren Williams (Harvard).

Parent Program(s): Tropical Geometry.

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

14-16 **The 9th Conference Shell Structures Theory and Applications**, Neptun Hotel, Hel Peninsula, Baltic Sea, Jurata, Poland. (Dec. 2008, p. 1451)

Description: The aim of the SSTA 2009 Conference is to bring together scientists, designers, engineers and other specialists of shell structures in order to discuss important results and new ideas in this broad field of activity. The previous one - 8th SSTA 2005 - was attended by 109 participants from 16 countries.

Conference Topics: The theory and analysis of shells, numerical analysis of shell structures and elements, design and maintenance of shell structures, special surface-related mechanical problems. The conference program will include general lectures and contributed oral presentations. The main language of the conference will be English.

Publications and Deadline: All accepted papers (full-length article in English) will appear in the hard-cover volume of Proceedings published by CRC Press/Balkema, Taylor & Francis Group. Deadline for submission of the full paper is February 28, 2009.

14-17 **Integers Conference 2009**, University of West Georgia, Carrollton, Georgia. (Apr. 2009, p. 524)

Description: *The Editors of Integers: Electronic Journal of Combinatorial Number Theory* are pleased to announce the Integers Conference 2009. The Integers conferences are international conferences in combinatorial number theory, held for the purpose of bringing together mathematicians, students, and others interested in combinatorics and number theory. The Integers Conference 2009 will also be honoring Professors Melvyn Nathanson and Carl Pomerance on the occasions of their 65th birthdays. The proceedings of the conference will be published as a special volume of the Integers journal. The conference will feature six plenary speakers and many other invited talks.

Information: <http://www.westga.edu/~math/IntegersConference2009>.

16-17 **Twenty-Ninth Southeastern Atlantic Regional Conference on Differential Equations (SEARCODE)**, Mercer University, Macon, Georgia. (Jun./Jul. 2009, p. 768)

Plenary Speakers: Howard (Howie) Weiss (Georgia Institute of Technology), H.T. Banks (North Carolina State University), Irena Lasiecka (University of Virginia). In addition to the plenary speakers, there will be sessions of twenty-minute contributed talks. Pending funding from the National Science Foundation, travel support funds will be available for advanced graduate students and recent Ph.D. recipients (2004 or later). Women and minorities are especially encouraged to participate in this conference and to apply for support.

Deadline: For abstracts in contributed session is October 2, 2009.

Information: <http://www.mercer.edu/math/searchde/> for information on registration, lodging, submission of abstracts, and application for support.

16–18 **AMS Central Section Meeting**, Baylor University, Waco, Texas. (Aug. 2008, p. 872)

Information: <http://www.ams.org/amsmtgs/sectional.html>.

19–22 **International Conference “Discrete Mathematics, Algebra, and their applications” (DIMA09)**, Belarus State University, Minsk, Belarus. (May 2009, p. 658)

Description: The conference is dedicated to the 80th birthday of Professor Regina Tyshkevich. The research activity of Regina Tyshkevich is connected with two fields: discrete mathematics (graph theory, combinatorics) and algebra (permutation groups, linear groups, matrix algebras). She is the founder of the Belarus school in graph theory, that has gained a worldwide recognition. Professor Tyshkevich was awarded the Belarus State Prize and the title of a Distinguished Worker of Education. The conference topics include (but are not restricted to): Graph theory, combinatorics, discrete optimization, algorithms, data structures and computational complexity, applications of discrete mathematics in computer science, operations research, algebra, topology, probability theory, permutation groups, linear groups and representations, Brauer groups of varieties and algebraic groups.

Information: <http://dima09.bsu.by>.

19–23 **Combinatorics: Combinatorial Geometry**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Dec. 2008, p. 1451)

Organizing Committee: Alexander Barvinok, Gil Kalai, Janos Pach, Jozsef Solymosi, Emo Welzl.

Overview: Combinatorial geometry deals with the structure and complexity of discrete geometric objects and is closely related to computational geometry, which deals with the design of efficient computer algorithms for manipulation of these objects. The focus of this workshop will be on the study of discrete geometric objects, their combinatorial structure, stressing the connections between discrete geometry and combinatorics, number theory, analysis and computer science.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmaws2>. Applications received by Sept. 7, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM’s mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cmaws2>; email: sbeggs@ipam.ucla.edu.

19–23 **Higher Reidemeister Torsion**, American Institute of Mathematics, Palo Alto, California. (Dec. 2008, p. 1451)

Description: This workshop, sponsored by AIM and the NSF, will focus on connections between different constructions for invariants of fiber bundles.

Information: <http://aimath.org/ARCC/workshops/reidemeister.html>; email: ebasor@aimath.org.

* 19–23 **Quantum Dynamic Imaging**, Centre de recherches mathématiques, Université de Montréal, Québec, Canada.

Description: Studying and using light or “photons” to image and then to control and transmit molecular information is amongst the most challenging and significant research fields to emerge in recent years.

One of the fastest growing areas involves research in the temporal imaging of quantum phenomena, molecular dynamics from the femtosecond (10^{*15}) time regime for atomic motion to the attosecond (10^{*18}) time scale natural to electron motion. In fact the attosecond “revolution” is now internationally recognized as one of the most important recent breakthroughs and innovations in the science of the 21st century.

Information: http://www.crm.umontreal.ca/Quantum09/index_e.php.

* 19–24 **Advanced Course on Shimura Varieties and L-functions**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: The Advanced Course consists of two series of lectures, delivered by S. W. Zhang (Columbia) and by Bas Edixhoven (Leiden University) and Andrei Yafaev (University College London), respectively. The aim of the lectures of S. W. Zhang is to give a comprehensive description of some recent work of the author and his students on generalisations of the Gross-Zagier formula, Euler systems on Shimura curves and rational points on elliptic curves. The aim of the course delivered by B. Edixhoven and A. Yafaev is to give an introduction to the proof (under the generalised Riemann hypothesis) of the so-called Andre-Oort conjecture by Yafaev, Klingler and Ullmo.

Information: <http://www.crm.cat/acshimura>.

20–22 **International Conference in Modeling Health Advances 2009**, UC Berkeley, San Francisco Bay Area, California. (Mar. 2009, p. 416)

Description: A host of new diseases, like HIV/AIDS, BSE, Avian Flu, West Nile Virus and others have appeared on the scene during the last twenty five years and undoubtedly, more will come in the coming years. To tackle these illnesses, the cooperation of modelers, mathematicians, statisticians, computer scientists, and others, and of researchers from the medical community is absolutely essential. Modeling is important because it gives important insight into the method of treatment. In the case of HIV/AIDS, for example, mathematical modeling indicated that a combination of both protease inhibitors and reverse transcriptase inhibitors would be far more effective than any one of these two drugs. The purpose of this conference is to bring all the people working in the area of epidemiology under one roof and encourage mutual interaction.

Information: <http://www.iaeng.org/WCECS2009/ICMHA2009.html>; email: publication@iaeng.org.

21–23 **The 4th International Conference on Research and Education in Mathematics 2009 (ICREM09)**, Kuala Lumpur, Malaysia. (Apr. 2009, p. 525)

Description: Mathematics, applications of mathematics, statistics, operation research, innovation in teaching mathematics, mathematics education and other related to mathematics and statistics.

Information: <http://www.inform.upm.edu.my>.

22–24 **Partial Differential Equations and Applications International Workshop for the 60th birthday of Michel Pierre**, Club Med, Vittel, France. (Apr. 2009, p. 525)

Description: The scope of this meeting is to gather international scientists to discuss recent advances in the fields studied by Michel Pierre, professor at ENS Cachan O’Antenne de Bretagne. His contributions are very important in non-linear analysis and applications to partial differential equations. More precisely, he is interested in one of the following topics : non-linear semi-groups, non-linear parabolic and elliptic partial differential equations with L1 or measure data, global existence for reaction-diffusion systems, shape optimization problem, in particular regularity of optimal shapes, control of PDE.

Information: <http://edpa2009.iecn.u-nancy.fr/>.

24–25 **AMS Eastern Section Meeting**, Pennsylvania State University, University Park, Pennsylvania. (Aug. 2008, p. 872)

Information: <http://www.ams.org/amsmtgs/sectional.html>.

25–30 **Mathematical Methods in Emerging Modalities of Medical Imaging**, Banff International Research Station, Banff, Canada. (Jun./Jul. 2009, p. 769)

Description: The workshop will assemble researchers from mathematics, physics, engineering and medicine interested in developing and implementing mathematical methods of novel medical diagnostic imaging. Among the techniques to be discussed are, in particular, optical tomography, electron tomography, phase contrast CT, thermo/photoacoustic tomography, elastography, ultrasound modulated optical tomography, and acousto-electric tomography. These new modalities of imaging involve challenging problems on crossroads of mathematics, physics, and engineering. The goal is to formulate the mathematical problems that must be resolved to meet outstanding challenges of this young and fast developing area and to assess and facilitate the current progress in these directions.

Information: http://www.birs.ca/birspages.php?task=displayevent&event_id=09w5017

26–28 **SAGA 2009, Fifth Symposium on Stochastic Algorithms, Foundations and Applications**, Hokkaido University, Sapporo, Japan. (May 2009, p. 658)

Description: The symposium offers the opportunity to present original research on the analysis, implementation, experimental evaluation, and real-world application of stochastic algorithms. The focus of SAGA'09 is on new algorithmic ideas involving stochastic decisions and the design and evaluation of stochastic algorithms within realistic scenarios. Thus, the symposium wants to foster the co-operation between practitioners and theoreticians from this research area.

Topics: Original research papers (including significant work-in-progress and work identifying and exploring directions of future research) or state-of-the-art surveys are invited on all aspects of algorithms employing stochastic components.

Information: <http://www-alg.ist.hokudai.ac.jp/~thomas/SAGA09/saga09.html>.

26–30 **Implementing algebraic geometry algorithms**, American Institute of Mathematics, Palo Alto, California. (May 2009, p. 658)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to developing three packages, algebraic statistics, numerical algebraic geometry, toric algebraic geometry, for the computer algebra system Macaulay 2. Macaulay 2 is a widely used computer algebra system for research and teaching in algebraic geometry and commutative algebra and is one of the leading computer algebra programs for performing such computations.

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

26–31 **Autumn School: “Towards a p-adic Langlands Correspondence”**, Mathematical Research Institute, University of Sevilla (IMUS), Sevilla, Spain. (May 2009, p. 658)

Description: The school is addressed to Ph.D. students and young post-doc researchers working on number theory, arithmetic algebraic geometry and related areas. There will be four main minicourses: (1) Introduction to the theory of representations of p-adic groups. (2) Modular forms, automorphic forms and GL(2). (3) The Langlands program. (4) Towards a modular Langlands correspondence.

Speakers: James Cogdell, Ohio State University; Jean François Dat, Université Paris 6; Guy Henniart, Université Paris Sud; Ariane Mézard, Université de Versailles; Vincent Sécherre, Université de Marseille; Shaun Stevens, University of East Anglia; Jose M. Tornero Sánchez, Universidad de Sevilla.

Information: <http://congreso.us.es/planglands09>.

* 28–29 **The 5th Central and Eastern European Software Engineering Conference in Russia 2009 (CEE-SECR 2009)**, Moscow, Russia. (Aug. 2009, p. 862)

Description: This conference is aimed to consolidate the local software professional community and to integrate it into the international software society. The Software Engineering Conference in Russia at-

tracts speakers from 15+ countries, over 500 participants from all over the world. The list of keynote speakers from previous SEC(R) conferences includes Michael Cusumano, Larry Constantine, Claudia Dent, Michael Fagan, Bill Hefley, Ivar Jacobson, Rick Kazman, Steve Masters, Mark Paulk and Michel Speranski, Erich Gamma, Stephen Mellor and many others. This conference is targeted at software professionals, such as Project Managers, Software Architects, Process Engineers, Software Engineering Process Group Directors, HR Specialists, Business Analysts, Team Leaders, IT Managers, CIO/CTO, QA Managers, Senior Developers, etc. from Russia, Ukraine, Belarus, Kazakhstan, Armenia, the Baltic, other CIS countries, Europe, and the U.S.

Information: <http://cee-secr.org/>.

* 29–31 **The 9th Red Raider Mini-Symposium: Non-linear Analysis, PDEs and Applications**, Texas Tech University, Lubbock, Texas. (Aug. 2009, p. 862)

Description: This is the 9th edition of the Annual Red Raider Mini-Symposium organized by the Department of Mathematics and Statistics, Texas Tech University. The Red Raider Mini-Symposium now has an established tradition of bringing in a range of distinguished scientists and promising early-career researchers in a particular area of modern mathematical importance. The theme for this year's mini-symposium is the mathematical analysis of non-linear problems in physics, engineering, and technology. This multidisciplinary research area spans nonlinear PDE, analysis, geometry, and scientific computing. The selection of conference speakers will emphasize interactions among these subject areas, applications of mathematics to other sciences, and important open problems. Additionally, the mutual interaction among speakers and attendees will lead to new opportunities for multi-disciplinary collaborations.

Information: <http://www.math.ttu.edu/redraider2009/>.

30–November 1 **AMS Southeastern Section Meeting**, Florida Atlantic University, Boca Raton, Florida. (Aug. 2008, p. 872)

Information: <http://www.ams.org/amsmtgs/sectional.html>.

November 2009

1–6 **23rd Large Installation System Administration Conference (LISA '09)**, Baltimore Marriott Waterfront, 700 Aliceanna Street, Baltimore, Maryland. (Mar. 2009, p. 416)

Description: Over 1,000 system administrators of all specialties and levels of expertise meet at LISA to exchange ideas, sharpen old skills, learn new techniques, debate current issues, and meet colleagues, vendors, and friends. Talks, presentations, posters, WiPs, and BoFs address a wide range of administration specialties, including system, network, storage, and security administration on a variety of platforms including Linux, BSD, Solaris, and OS X.

Information: <http://usenix.org/events/lisa09/>.

1–December 31 **Financial Mathematics**, Institute for Mathematical Sciences, National University of Singapore, Singapore. (Jan. 2009, p. 73)

Description: This program will be focusing on, but not limited to, the following three areas: 1) the pricing and hedging of environmental and energy-related financial derivatives; 2) risk and robust optimization; 3) optimal stopping and singular stochastic control problems in finance. These areas form the substance of 3 workshops in the two-month long program. The workshops are intended for researchers working in the specific areas to congregate, cross-pollinate ideas, exchange knowledge, and together advance the mathematical frontiers in publishing and disseminating rigorous pieces of scholastic work.

Information: <http://ims.nus.edu.sg/Programs/financialm09/index.htm>; email: imsceec@nus.edu.sg.

2–6 **Combinatorics: Topics in Graphs and Hypergraphs**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2009, p. 74)

Overview: The workshop will focus on several research directions in modern graph and hypergraph theory including Ramsey theory, extremal problems for graphs and hypergraphs and in particular

Turan-type questions, extremal set theory and its applications to information theory, computer science and coding theory, algebraic methods in extremal combinatorics, Szemerédi's regularity lemma for graphs and hypergraphs and its application to number theory and property testing.

Organizing Committee: Penny Haxell, Dhruv Mubayi, Vera Sos, Benjamin Sudakov, Jacques Verstraete.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmaws3/>. Applications received by Sept. 21, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cmaws3/>; email: sbeggs@ipam.ucla.edu.

2-6 **The Cuntz Semigroup**, American Institute of Mathematics, Palo Alto, California. (Apr. 2009, p. 525)

Description: This workshop, sponsored by AIM and the NSF, will explore the Cuntz semigroup; an invariant of C^* -algebras inspired by K -theory and recently shown to be important for classification.

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

* 2-7 **DNA Topology Course-Workshop 2009**, Okinawa Institute of Science and Technology, Okinawa, Japan.

Organizers: Robert Sinclair, OIST, Japan Nafaa Chbili, UAE University, United Arab Emirates.

Confirmed Speakers: De Witt Summers, Patrick Forster, Jun O'Hara, Javier Arsuaga, Dorothy Buck, Isabel Darcy, Christian Laing, Jennifer K. Mann, Koya Shimokawa, Andrzej Stasiak, Mariel Vazquez, and Lynn Zechiedrich.

Information: http://web.me.com/oist_mbu/DNA_Topology_Course/Home.html.

6-10 **XV International Conference on Mathematics, Informatics and Related Fields**, Hotel Energetyk, Naleczow, Poland. (Jun./Jul. 2009, p. 769)

Topics: Mathematical analysis, probability and statistics, computer science, applied mathematics and mathematical didactics.

Scientific Committee: Bogdan Bojarski, Theodor Bulboaca, Stanisława Kanas, Jacek Kluska, Józef Korbicz, Piotr Liczberski, Dariusz Partyka, Wiesław Pleśniak, Arkadiusz Płoski, Dymitr Prokhorov, Zdzisław Rychlik, Józef Siciak, Hari M. Srivastava, Jan Stankiewicz, Toshiyuki Sugawa, Zbigniew Suraj, Józef Zajc, Jarosław Zemanek.

Organizing Committee: Stanisława Kanas, Beata Fałda, Zdzisław Rychlik, Anna Szpila, Katarzyna Wilczek.

Information: <http://ptm.prz.rzeszow.pl/konferencja/>.

7-8 **AMS Western Section Meeting**, University of California, Riverside, California. (Aug. 2008, p. 872)

Information: <http://www.ams.org/amsmtgs/sectional.html>.

9-13 **Cyclic homology and symplectic topology**, American Institute of Mathematics, Palo Alto, California. (Apr. 2009, p. 525)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to the incarnations of cyclic homology in symplectic topology.

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

* 13-15 **International Conference on Mathematics and Information Security**, Sohag University, Sohag, Egypt.

Description: The aim of the conference is to bring together the teachers, researchers, and scientists working in the field of Mathematics, Theoretical Physics, Statistics and Applied Statistics including Operation Research and Computer Sciences. The ICMS organized by the Department of Mathematics, Faculty of Science, Sohag University, is being held in Sohag, Egypt. The gathering of distinguished mathematicians, statisticians, researchers, and academicians from around the

whole world is expected to provide a unique opportunity to share their latest research and discoveries and thought provoking ideas with their fellow scientists on various disciplines of mathematics and its allied subjects.

Information: <http://www.icamis2009.tk/>.

16-20 **MSRI Upcoming Workshops: Algebraic Structures in the Theory of Holomorphic Curves**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 862)

Organizers: Mohammed Abouzaid (Clay Mathematics Institute), Yakov Eliashberg (Stanford University), Kenji Fukaya (Kyoto University), Eleny Ionel (Stanford University), Lenny Ng (Duke University), Paul Seidel (MIT).

Parent Program(s): Symplectic and Contact Geometry and Topology.
Information: <http://www.msri.org>.

19-21 **2nd meeting on Optimization Modelization and Approximation Moma 2009**, Hassania School, Public Works Département de Mathématiques et Informatique Km 7, Route d'El Jadida, B.P 8108, Oasis-Casablanca, Morocco. (May 2009, p. 658)

Description: The scope of this second meeting covers a range of major topics in numerical analysis, optimization, also in approximation and engineering and related disciplines, ranging from theoretical developments to industrial applications and modelling of problems. The themes of the conference include, but are not limited to: Optimization, computational optimization frameworks, optimization modeling, approximation theory, radial basis functions, scattered data approximation, learning machine theory, meshless methods, numerical analysis, modelization. Applications: Image processing, financial computation, medicine and biology.

Information: <http://www-lmpa.univ-littoral.fr/MOMA09/>.

23-27 **Mathematics and Astronomy: A Joint Long Journey**, CSIC, Madrid, Spain. (Jun./Jul. 2009, p. 769)

Description: Mathematics and Astronomy walked together for thousands of years. Ptolemy, Copernicus, Galileo, Kepler, Newton are good examples of this fruitful interaction between both disciplines. In medieval educational theory, the "quadrivium" consisted of arithmetic, geometry, music, and astronomy, which prove their common past in the development of science. More recently, the extraordinary works by Einstein with the General Theory of Relativity give new insights to our vision of the universe, in a wonderful cooperation of geometry and physics. The proposed symposium wants to show and stress these links with the occasion of the celebration of the International Year of Astronomy IYA2009.

Information: <http://www.astromath2009.com>.

29-December 4 **Southern Right Delta ($\Sigma P\Delta'09$) Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics**, Gordon's Bay, Western Cape, South Africa. (Feb. 2009, p. 310)

Description: Mathematics and Astronomy walked together for thousands of years. Ptolemy, Copernicus, Galileo, Kepler, Newton are good examples of this fruitful interaction between both disciplines. In medieval educational theory, the "quadrivium" consisted of arithmetic, geometry, music, and astronomy, which prove their common past in the development of science. More recently, the extraordinary works by Einstein with the General Theory of Relativity give new insights to our vision of the universe, in a wonderful cooperation of geometry and physics. The proposed symposium wants to show and stress these links with the occasion of the celebration of the International Year of Astronomy IYA2009.

Information: <http://www.astromath2009.com>.

30-December 4 **International Conference on Elliptic and Parabolic Equations**, Weierstrass Institute for Applied Analysis and Stochastics (WIAS), Berlin, Germany. (Aug. 2009, p. 862)

Description: Elliptic and parabolic PDE's have been powerful models of problems in science and engineering for more than a quarter millennium. The classical solution theory of these equations assumes "perfect" spatial domains and coefficients. However, to deal with

real world problems today, one has to take into account vertices and edges of three-dimensional spatial domains, discontinuous coefficient functions, and various mixed boundary conditions. Suitable regularity for such linear elliptic problems is crucial for the solution theory of corresponding nonlinear elliptic and parabolic equations. This conference will examine the progress in this direction, and elliptic and parabolic equations in real space at large. One day of the conference will be specifically devoted to Navier-Stokes equations.

Information: <http://www.wias-berlin.de/workshops/epe09>.

30-December 4 **MSRI Upcoming Workshops: Tropical Structures in Geometry and Physics**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 863)

Organizers: Mark Gross (University of California San Diego), Kentaro Hori (University of Toronto), Viatcheslav Kharlamov (Université de Strasbourg (Louis Pasteur)), Richard Kenyon (Brown University).

Parent Program(s): Tropical Geometry.

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

December 2009

1-4 (NEW DATE) **Combinatorics: Analytical Methods in Combinatorics, Additive Number Theory and Computer Science**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Dec. 2008, p. 1452)

Overview: This workshop will focus on the interplay between combinatorics, discrete probability, additive number theory and computer science with emphasis on a wide spectrum of analytical tools that are used there. One of the workshop's aims is to foster interaction between researchers in these areas, discuss recent progress and communicate new results and ideas. We would also like to utilize this forum to make the state-of-the-art analytical techniques accessible to a broader audience.

Organizing Committee: Irit Dinur, Ben Green, Gil Kalai, Alex Samorodnitsky, Terence Tao, Van Vu.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmaws4>. Applications received by Oct. 5, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cmaws4/>; email: sbeggs@ipam.ucla.edu.

7-9 **SIAM Conference on Analysis of Partial Differential Equations (PD09)**, Hilton Miami Downtown, Miami, Florida. (Feb. 2009, p. 310)

Overview: This workshop will focus on the interplay between combinatorics, discrete probability, additive number theory and computer science with emphasis on a wide spectrum of analytical tools that are used there. One of the workshop's aims is to foster interaction between researchers in these areas, discuss recent progress and communicate new results and ideas. We would also like to utilize this forum to make the state-of-the-art analytical techniques accessible to a broader audience.

Organizing Committee: Irit Dinur, Ben Green, Gil Kalai, Alex Samorodnitsky, Terence Tao, Van Vu.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/cmaws4>. Applications received by Oct. 5, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/cmaws4/>; email: sbeggs@ipam.ucla.edu.

7-11 **IMA Workshop: Microfluidics: Electrokinetic and Interfacial Phenomena**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 525)

Description: Microfluidics is the science of fluid motion on microscopic scales, roughly 100 nanometers to 100 microns. In this regime inertial effects are negligible and interfacial effects, i.e., surface tension, capillarity, electrostatic charge, etc. dominate. The subject has emerged as an area of intense interest in the applied sciences because of applications in nanotechnology and bio-analytical chemistry. The workshop will focus on topics in the basic science of ionic fluids: zeta potentials, Debye Layers, electroosmosis and electrophoresis; interfacial effects and applications such as controlled droplet motion by electrowetting, and the Brownian hydrodynamics of macromolecules and polymers.

Information: <http://www.ima.umn.edu/2009-2010/W12.7-11.09/>.

* 9-12 **Advanced Course on Algebraic Cycles, Modular Forms, and Rational Points on Elliptic Curves**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: The theme of this course is the construction of algebraic points on elliptic curves from special points and higher-dimensional cycles on Shimura varieties and closely related objects. The lecturers will provide background for, explain, and, time permitting, expand further on the results that are proven in the two works in progress: 1.- M. Bertolini, H. Darmon, and K. Prasanna, "Generalized Heegner cycles and p-adic Rankin L-series"; 2.- M. Bertolini, H. Darmon, and K. Prasanna, "Chow-Heegner points on CM elliptic curves and values of p-adic L-series".

Information: <http://www.crm.cat/accycles>.

14-18 **AMSI Workshop: New Directions in Geometric Group Theory**, The University of Queensland, Brisbane, Australia. (Aug. 2009, p. 863)

Description: This workshop will examine the influx of new ideas, trends, and advances in geometric group theory with focus on: (1) analysis (Baum-Connes conjecture, Kazhdan's property, amenability, soficity, rapid decay); (2) statistics (random walks, random subgroups, percolation, generic properties of groups); and (3) geometry (Cannon conjecture, boundaries, BNS invariants, bounded (co)-homology of groups, isoperimetric functions). We gratefully acknowledge support of the Australian Mathematical Sciences Institute, the Australian Mathematical Society, and the School of Mathematics and Physics at the University of Queensland.

Information: <http://sites.google.com/site/ggtbrisbane/Home>.

14-18 **Brownian motion and random matrices**, American Institute of Mathematics, Palo Alto, California. (May 2009, p. 659)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to beta-generalizations of the classical ensembles in random matrix theory. These are certain tridiagonal and unitary Hessenberg matrices, with an eigenvalue p.d.f. generalizing that of Gaussian Hermitian matrices and Haar distributed unitary matrices.

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

16-18 **The 4th Indian International Conference on Artificial Intelligence (IICAI-09)**, Tumkur (near Bangalore), India. (Dec. 2008, p. 1452)

Description: The conference consists of paper presentations, special workshops, sessions, invited talks and local tours, etc. and it is one of the biggest AI events in the world. We invite draft paper submissions.

Information: For details visit: <http://www.iiconference.org>.

17-21 **The 14th Asian Technology Conference in Mathematics (ATCM 2009)**, Beijing Normal University, Beijing, China. (Apr. 2009, p. 525)

Description: Conference Theme "Journey to discover more mathematics". The ATCM 2009 is an international conference to be held in China that will continue addressing technology-based issues in all mathematical sciences. The aim of this conference is to provide a

forum for educators, researchers, teachers and experts in exchanging information regarding enhancing technology to enrich mathematics learning, teaching and research at all levels. English is the official language of the conference. There will be over 400 participants coming from over 33 countries around the world. Deadlines for abstract and full paper are June 15 and July 30 respectively.

Information: <http://atcm.mathandtech.org>.

19–21 **International Conference on Current Trends in Mathematics**, Allahabad, Uttar Pradesh, India. (May 2009, p. 659)

Description: The aim of the conference is to introduce undergraduate and Ph.D. students in mathematics as well as post-doctoral researchers to recently emerged trends of mathematics.

Deadline: Submit abstracts with full-length paper to: complexgeometry18@yahoo.com: October 20, 2009. Acknowledgement of accepted papers by email: October 25, 2009. For registration: November 15, 2009. All submitted papers will be under peer review and accepted papers will be published in the conference proceedings.

Information: complexgeometry18@yahoo.com; Sushil Shukla (email: ss123a@rediffmail.com); <http://sites.google.com/site/educationalconferenceorg/ss>.

21–22 **Mathematical Sciences for Advancement of Science and Technology (MSAST 2009)**, IMBIC Hall, Salt Lake City, Kolkata, (Calcutta), West Bengal, India. (Aug. 2009, p. 863)

Description: The 3rd International Conference organized by the Institute for Mathematics, Bioinformatics, Information Technology and Computer Science (IMBIC) on “Mathematical Sciences for Advancement of Science and Technology” (MSAST 2009) will be held during December 21–22, 2009, at IMBIC Hall, Kolkata, India. Authors are requested to submit the full original papers for presentation and publication in the Proceedings of the conference related to the theme of the conference: “Mathematical Sciences for Advancement of Science and Technology” indicating the motivation of the problem, its method of solution, and important results to the Secretary of IMBIC.

Information: All correspondences in respect of the conference are to be addressed to Dr. Avishek Adhikari, Secretary, IMBIC, AH 317, Salt Lake City, Sector II, Kolkata 700091, West Bengal, India, email: avishek.adh@gmail.com; <http://imbic.org/forthcoming.html>.

28–31 **Seventh International Triennial Calcutta Symposium on Probability and Statistics**, Department of Statistics, University of Calcutta, 35 Ballygunge Circular Road, Kolkata- 700019, West Bengal, India. (Aug. 2009, p. 863)

Description: The Seventh International Triennial Calcutta Symposium, following the previous six symposia, will bring together researchers engaged in theoretical, methodological, and applied aspects of statistics and probability on a common platform. A large number of researchers from all over the world are expected to attend. There will be invited and technical sessions and poster sessions for students and young researchers. The best posters will be awarded. The Department of Statistics, Calcutta University, is the oldest post-graduate department in Asia offering a course in statistics. It is recognized as one of the prime departments of Statistics in India. Calcutta Statistical Association is an international learned society closely associated with the department. The Association publishes an internationally circulated journal of its own besides organizing lectures, seminars, workshops, and symposia.

Information: <http://triennial.calcuttastatisticalassociation.org>.

January 2010

2–4 **International Convention on Mathematical Sciences**, Allahabad, India. (May 2009, p. 659)

Description: The aim of the conference is to introduce undergraduate and Ph.D. students in mathematics as well as post-doctoral researchers in recently emerged trends of mathematics.

Deadlines: The deadline for submitting abstracts with full-length paper to complexgeometry18@yahoo.com: October 20, 2009. Acknowledgement of accepted papers by email: October 25, 2009. For registration: November 15, 2009. All submitted papers will be under peer review and accepted papers will be published in the conference proceedings.

Information: Contact: complexgeometry18@yahoo.com.

* 4–July 2 **Stochastic Partial Differential Equations**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Organizers: Z. Brzezniak (York), M. Hairer (Warwick), M. Röckner (Universität Bielefeld), P. Souganidis (Chicago), and R. Tribe (Warwick).

Description: Stochastic Partial Differential Equations are used to model many physical systems subjected to the influence of internal, external or environmental noise. They also arise when considering deterministic models from random initial conditions, or as tractable approximations to complex deterministic systems. In many cases the presence of noise leads to new phenomena with many recent examples in the physical sciences, biology and financial modelling. The goal of the program is to bring together the world leaders in Stochastic Partial Differential Equations working on various aspects of the theory, numerical approximations and applications, as well as in related scientific areas. A number of workshops will take place during the programme.

Information: <http://www.newton.ac.uk/programmes/SPD/ws.html>.

5–9 **New Directions in Financial Mathematics**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Aug. 2009, p. 863)

Overview: The workshop will introduce researchers and mathematicians to two fields of research: environmental emissions markets and mathematical models for financial markets. Among other talks, there will be a short course on the challenge of the environment and the attempts to use financial markets to control emissions of greenhouse gases in the most efficient way, and a short course on agent-based models for financial markets.

Organizing Committee: Rene Carmona, Jaska Cvitanic, Nicole El Karoui, George Papanicolaou, Eduardo Schwartz, Ronnie Sircar, Thaleia Zariphopoulou.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/fin2010>. Applications received by Nov. 9, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM’s mission and we welcome their applications. You may also simply register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/fin2010/>.

* 11–July 2 **Stochastic Processes in Communication Sciences**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Organizers: V. Anantharam, F. Baccelli, D. Denisov, S. Foss, P. W. Glynn, and T. Konstantopoulos.

Description: Probability theory and communications have developed hand in hand for about a century. The research challenges in the latter field (from telephone networks to wireless communications and the Internet) have spurred the development of the mathematical theory of stochastic processes, particularly in the theory of Markov processes, point processes, stochastic networks, stochastic geometry, stochastic calculus, information theory, and ergodic theory. Conversely, a large number of applications in communications would not have been possible without the development of stochastics. This program aims at the exposition of the latest developments in mathematical sciences lying on the boundary between stochastics and communications. Several workshops will take place during the program.

Information: <http://www.newton.ac.uk/programmes/SPD/ws.html>.

* 13-16 **Joint Mathematics Meetings**, San Francisco, California.

Information: <http://www.ams.org/amsmtgs/national.html>.

17-19 **ACM-SIAM Symposium on Discrete Algorithms (SODA10)**, Hyatt Regency Austin, Austin, Texas. (Apr. 2009, p. 525)

Description: This symposium focuses on research topics related to efficient algorithms and data structures for discrete problems. In addition to the design of such methods and structures, the scope also includes their use, performance analysis, and the mathematical problems related to their development or limitations. Performance analyses may be analytical or experimental and may address worst-case or expected-case performance. Studies can be theoretical or based on data sets that have arisen in practice and may address methodological issues involved in performance analysis.

Information: <http://www.siam.org/meetings/da10/>.

24-26 **International Conference on Analysis and Applications (ICAA10)**, Sultan Qaboos University, Muscat, Oman. (May 2009, p. 659)

Description: The aim of this conference is to reflect the current state of the art in the study of analysis with the hope to promote scientific exchange among analysts all over the world. The main goal of this conference is to discuss new developments and future directions in analysis. Its particular focus is on the active participation of all who attend to promote a spirit of training, learning and communicating. The conference will consist of plenary talks and contributed talks of 25 minutes (20 + 5 for discussion) in parallel special sessions. All areas of analysis-related mathematics, especially topology, complex analysis, real and functional analysis, numerical analysis, and applications of analysis to other areas of mathematics and the sciences, will be covered. For any inquiries please contact us at: <http://icaa10@squ.edu.om>.

Information: <http://www.squ.edu.om/Portals/87/Conference/ICAA10/conference2010/ICAA10.htm>.

* 25-29 **III Internacional Conference on the Anthropological Theory of the Didactic**, The Vilar Rural Hotel, Sant Hilari Sacalm, Catalonia, Spain.

Description: The Anthropologic Theory of the Didactic constitutes a development of the didactic transposition theory born in 1985 with the publication of Chevallard's book "La transposition didactique: du savoir savant au savoir enseigné". The main goal of the Conference is to gather researchers working to present empirical studies carried out in the educational systems of different countries, to discuss and spread the results obtained, and to agree on a common programme of research and development for the coming years.

Information: <http://www.crm.cat/cdidactic>.

25-29 **Metamaterials: Applications, Analysis and Modeling**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jun./Jul. 2009, p. 769)

Overview: This workshop brings together three groups of people: physicists and engineers working on metamaterials and their applications; mathematicians who are studying homogenization in high contrast materials and are providing a greater understanding of the mathematics of metamaterials; and numerical analysts interested in the solving the microscopic and macroscopic equations governing the behavior of metamaterials.

Organizing Committee: Robert Kohn, Graeme Milton, Susanne Brenner, Maria-Carme Calderer, Tatsuo Itoh, Jichun Li, Chi-Wang Shu, Richard Zolnikowski.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/meta2010>. Applications received by November 30, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

* 25-30 **International School on Combinatorics "Pilar Pisón-Casares"**, Facultad de Matemáticas, Universidad de Sevilla, Spain.

Description: The School is addressed to Ph.D. students and young post-doc researchers working on Algebraic Geometry, Combinatorics, Commutative Algebra and related areas, introducing the participants to research, beginning from a basic level with a view towards the applications and to the most recent results.

Organizers: A. Castaño Domínguez, M. C. Fernández Fernández, Jaime Lugo Gómez, José Navarro Garmendia.

February 2010

* 2-4 **3rd Global Conference on Power Control and Optimization PCO 2010**, Courtyard Surfers Paradise Resort, Gold Coast, Queensland, Australia.

Description: It is our great pleasure to announce the third Global Conference on Power Control and Optimization PCO 2010, which will be held in Courtyard Surfers Paradise Resort, Gold Coast, Australia, from 2-4 February 2010. Scope of the conference is contemporary and original research and educational development in the area of electrical power engineering, control systems and methods of optimization. Prospective authors from universities or institutes and industries are invited to submit the full paper by email before the deadline. All papers will be peer-reviewed by independent specialists. Conference proceeding will be published online by AIP.

Information: Please kindly contact Conference Chairman Professor Dr. Nader Kisho at icpco.20@gmail.com, tel:+6085443821, fax:+6085443837 and Conference Secretary General Pandian Vasant at vasantglobal@gmail.com.

8-11 **The International Symposium on Stochastic Models in Reliability Engineering, Life Sciences, and Operations Management**, Sami Shamon College of Engineering, Bialik/Basel Sts., Beer Sheva, 84100, Israel. (May 2009, p. 659)

Description: The SMRLO'10 will serve as a forum for discussing different issues of Stochastic Models and Methods in Reliability Engineering, Life Sciences, and Operations Management and their applications. The idea of the symposium is to assemble researchers and practitioners from universities, institutions, industries, businesses and government, working in these fields. Theoretical issues and applied case-studies, presented on the symposium, will range from academic considerations to operational applications. There will be invited talks, plenary sessions, parallel sessions, posters and exhibitions. The talks will be selected by the program committee and will be included in the symposium proceedings. Selected papers after review and revision will be published in special issues of international journals.

Information: Tel: +972-8-6475-642; fax: +972-8-6475-643; <http://info.sce.ac.il/i/SMRLO10>.

8-12 **Mathematical Problems, Models and Methods in Biomedical Imaging**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jun./Jul. 2009, p. 770)

Overview: The workshop's topics will include some of the current major technologies and emerging mathematical problems in biomedical imaging. The emphasis will be on the interface between Mathematics and Biomedical Imaging to promote new ideas and research at the frontiers of interdisciplinary studies.

Organizing Committee: Hongkai Zhao, Yair Censor, Steve Jiang, Belinda Seto, Lei Xing.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/bmed2010>. Applications received by Dec. 14, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

* 8-12 **PIA 2010 — The Arithmetic of Fundamental Groups**, Mathematics Center Heidelberg (MATCH), Heidelberg, Germany.

Description: The conference PIA 2010 will cover different approaches to the arithmetic of fundamental groups that have been successful recently and remain promising in the focus of current and future developments. PIA 2010 intends to bring together knowledge in the area of anabelian geometry, pro-finite étale fundamental groups, tannakian/motivic algebraic fundamental groups, p-adic fundamental groups, and in the interplay between fundamental groups and special objects like the polylogarithm.

Description: <http://www.pia2010.mathi.uni-heidelberg.de/>.

18–19 **February Fourier Talks 2010**, Norbert Wiener Center, University of Maryland, College Park, Maryland. (Jun./Jul. 2009, p. 770)

Description: Each year the two-day February Fourier Talks, organized by the Norbert Wiener Center in the Department of Mathematics at the University of Maryland, College Park, feature a diverse array of invited talks in the field of Harmonic Analysis and Applications. A single track of presentations from top academic, industry, and government researchers is scheduled, allowing ample time for interaction with other participants. The conference will feature a talk in our Distinguished Lecturer Series by Elias Stein of Princeton University, and the Norbert Wiener Lecture, delivered by Charles Fefferman of Princeton University.

Information: <http://www.norbertwiener.umd.edu/FFT/FFT10/index.html>.

22–26 **IMA Workshop: Analysis and Computation of Incompressible Fluid Flow**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 525)

Description: The mathematical and numerical analysis of incompressible flows is of paramount importance for understanding basic nonlinear phenomena in science and engineering. The subject contains some of the most challenging nonlinear partial differential equations of mathematical physics, posing problems for both analysis and computation. This workshop will address modern developments in the core analytical issues of existence and uniqueness of smooth solutions, as well as of weak solutions and statistical solutions. Additional topics will include geophysical flows, analysis of complex fluid models, free surface problems, vanishing viscosity limits, and numerical methods for scientific computation of complex flows.

Information: <http://www.ima.umn.edu/2009-2010/W2.22-26.10/>.

22–26 **Statistical and Learning-Theoretic Challenges in Data Privacy**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jun./Jul. 2009, p. 770)

Overview: The workshop's goal is to establish a coherent theoretical foundation for research on data privacy. This implies work on how the conflicting goals of privacy and utility can or should be formulated mathematically, and how the constraints of privacy affect the accuracy of statistical inference and machine learning.

Organizing Committee: Adam Smith, Cynthia Dwork, Stephen Fienberg, Aleksandra Slavkovic.

Application/Registration: An application and registration form is available at <http://www.ipam.ucla.edu/programs/data2010>. Applications received by December 21, 2009, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

24–26 **SIAM Conference on Parallel Processing and Scientific Computing (PP10)**, Hyatt Regency Seattle, Seattle, Washington. (Apr. 2009, p. 525)

Description: This conference organized by the SIAM Activity on Supercomputing.

Information: <http://www.siam.org/meetings/pp10/index.php>.

March 2010

8–12 **AIM Workshop: Mock Modular Forms in Combinatorics and Arithmetic Geometry**, American Institute of Mathematics, Palo Alto, California. (Jun./Jul. 2009, p. 770)

Description: This workshop, sponsored by AIM and the NSF, will focus on mock modular forms as they occur in combinatorics and arithmetic geometry and explore some other potential applications.

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

8–June 11 **Long Program: Model and Data Hierarchies for Simulating and Understanding Climate**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Apr. 2009, p. 526)

Overview: Simulation has advanced climate science, but not sufficiently to the profit of theory and understanding. Our hypothesis is that the development of climate science will be best served by focusing computational and intellectual resources on model and data hierarchies. By bringing together physicists, mathematicians, statisticians, engineers, and climate-scientists to focus on themes across scales and scientific methodologies, our program will provide a framework for advancing our use of hierarchical methods in our attempt to understand the climate system.

Organizing Committee: Amy Braverman, Rupert Klein, Andrew Majda, Olivier Pauluis, Bjorn Stevens.

Application and Information: Information and an application form is available at <http://www.ipam.ucla.edu/programs/CL2010>. Applications for individual workshops will be posted on individual workshop home pages. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications.

15–19 **Localization techniques in equivariant cohomology**, American Institute of Mathematics, Palo Alto, California. (May 2009, p. 659)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to localization techniques in equivariant cohomology. Localization techniques in equivariant cohomology are a powerful tool in computational algebraic topology in the context of a topological space with the action of a Lie group.

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

17–19 **IAENG International Conference on Operations Research 2010**, Regal Kowloon Hotel, Hong Kong, China. (Aug. 2009, p. 863)

Organizers: The conference ICOR'10 is held under the International MultiConference of Engineers and Computer Scientists 2010. The IMECS 2010 is organized by the International Association of Engineers (IAENG).

Important Dates: Draft Manuscript submission deadline: December 8, 2009; Camera-Ready Papers Due & Registration Deadline: January 10, 2010; ICOR 2010: March 17–19, 2010.

Topics: ICOR'10 include, but not limited to, the following: Management Science Managerial economics Systems thinking and analysis Optimization Integer programming Linear programming Nonlinear programming Assignment problem Transportation network design Simulation Statistical Analysis Stochastics Modelling Reliability and maintenance Queueing theory Game theory Graph theory OR algorithms and software developments OR applications and case studies.

Information: <http://www.iaeng.org/IMECS2010/ICOR2010.html>.

* 18–20 **44th Spring Topology and Dynamics Conference 2010**, Mississippi State University, Starkville, Mississippi.

Description: The 44th Annual Spring Topology and Dynamics Conference regularly attracts 150–200 participants and offers a healthy mixture of invited and contributed talks. Special sessions are organized in General and Set Theoretic Topology, Continuum Theory, Dynamical Systems, Geometric Topology and Geometric Group Theory.

Information: <http://www2.msstate.edu/~fabel/sptop10a>.

18–21 **First International Conference on Mathematics and Statistics, AUS-ICMS '10**, American University of Sharjah (AUS), Sharjah, United Arab Emirates. (Jun./Jul. 2009, p. 770)

Description: The main objective of the conference is to bring together researchers and scientists working in all areas of mathematics and statistics from academia and industry to exchange research ideas, discuss the most recent advancements in all fields of mathematics and sciences, and to promote interaction between our faculty and researchers from the region and worldwide.

Topics: To be covered include, but are not limited to: Algebra, analysis, applied mathematics, applied statistics, differential equations, discrete mathematics, financial mathematics, mathematics education, number theory, numerical analysis, probability theory, statistics, stochastic differential equations, and topology and geometry.

Information: <http://www.aus.edu/conferences/icms10/>.

* 22–26 **Equation Hierarchies for Climate Modeling**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.

Overview: This workshop will focus the discussion on problems such as: 1) the development of new balanced systems of equations using techniques such as multiple scales asymptotics, 2) the use of simplified sets of equations as models of the Earth or other planetary climates, 3) balance dynamics and the breakdown of balance, and 4) the role of latent heating in the dynamics of the tropical and extratropical atmosphere and simplified ways to account for condensation in models.

Application/Registration: An application and registration form is available at <http://www.ipam.ucla.edu/programs/clws1>. Applications received by Jan. 25, 2010, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

Organizing Committee: Simona Bordoni, Dargan Frierson, Andrew Majda, Jonathan Mitchel.

* 27–28 **AMS Southeastern Section Meeting**, University of Kentucky, Lexington, Kentucky.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

29–April 2 **AIM Workshop: Computational optimization for tensor decompositions**, American Institute of Mathematics, Palo Alto, California. (Jun./Jul. 2009, p. 770)

Description: This workshop, sponsored by AIM and the NSF, will be devoted to facilitating the development of new decomposition methods and to provide fundamentally new insights into both tensor decompositions and numerical optimization.

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

April 2010

* 10–11 **AMS Central Section Meeting**, Macalester College, St. Paul, Minnesota.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

12–16 **Climate Modeling: Numerical Hierarchies for Climate Modeling**, Introduction for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Aug. 2009, p. 863)

Overview: This workshop will focus on advanced computational techniques which allow us to cover a wide range of spatio-temporal scales in a single simulation, and which operate reliably at various resolutions. Of particular interest will be mechanisms for selecting non-resolved scale parameterizations as a function of grid resolution and for controlling the interplay of numerical truncation with subgrid scale process representations.

Organizing Committee: Francis Giraldo, Christiane Jablonowski, Rupert Klein, Sebastian Reich.

Application/Registration: An application and registration form is available at: <http://www.ipam.ucla.edu/programs/clws2>.

Applications received by Feb. 15, 2010, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

Information: <http://www.ipam.ucla.edu/programs/clws2/>.

12–16 **IMA Workshop: Transport and Mixing in Complex and Turbulent Flows**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 526)

Description: Enhanced mixing and transport properties are distinguishing characteristics of both turbulent and more structured complex flows. The concepts of eddy diffusion and eddy viscosity, for example, were introduced as attempts to “parameterize” these effects to produce reduced models for theoretical analysis and simulations. At the same time turbulent mixing and transport is the focus of significant attention from a fundamental point of view, based in some cases on the Navier-Stokes equations and in other cases on models or special flows amenable to more thorough analytical investigations. This workshop is concerned with modern mathematical approaches to the study of transport and mixing in turbulence and other complex flows, including transitional flows with significant attention to applications from the applied sciences, predominantly geophysics.

Information: <http://www.ima.umn.edu/2009-2010/W4.12-16.10/>.

14–17 **International Workshop on Multivariate Risks and Copulas**, Mohamed Khider University of Biskra, Algeria. (Aug. 2009, p. 863)

Description: The first edition of the International Workshop on Multivariate Risks and Copulas which will be held April 14–17, 2010, at Mohamed Khider University of Biskra, Algeria. The workshop will serve as a forum for discussing different issues of risks, copulas, and related topics. The main goal of this scientific event is to gather researchers and practitioners from universities, institutions, industries, and government, working in these fields. The tools and methodologies in progress in probability, statistics, mathematics, and economics that are closely relevant for Univariate and Multivariate Risks will be embraced as well. We are proud to organize this workshop and look forward to welcoming you in Biskra.

Information: http://www.univ-biskra.dz/manifestations/math/stat_2010/.

15–17 **35th Spring Lectures Series, 2010 “Minimal Surfaces and Mean Curvature Flow”**, University of Arkansas, Fayetteville, Arkansas. (Aug. 2009, p. 864)

Speakers and Talks: The main speaker is William Minicozzi (Johns Hopkins University). The title of the conference is “Minimal Surfaces and Mean Curvature Flow”. Professor Minicozzi will deliver a total of five lectures. There will be ten talks by the following invited speakers: Maria Calle, Julie Clutterbuck, Tobias Colding, Camillo De Lellis, Lei N, Felix Schulze, Natasa Sesum, Mu-Tao Wang, Matthias Weber, Michael Wolf.

Information: Applications for contributed talks by junior mathematicians are strongly encouraged. Titles and abstract should be received by the organizers not later than March 15th, 2010. For further questions please contact Andy Raich araich@uark.edu; <http://www.math.uark.edu>.

* 17–18 **AMS Western Section Meeting**, University of New Mexico, Albuquerque, New Mexico.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

May 2010

* 3–7 **Advanced Course on Foliations: Dynamics-Geometry-Topology**, Centre de Recerca Matemàtica (CRM), Bellaterra, Barcelona, Spain.

Description: One advanced course will present the fundamentals of foliation theory, and the other advanced courses will introduce some of its most active areas, like dynamics of foliations, classifying spaces, index theory for foliations and group actions, or rigidity and leafwise

ohomology. These courses should provide the audience with the necessary tools to work on some of the most important unsolved problems on foliation theory.

Information: <http://www.crm.cat/acfoli>.

* 3-7 **Simulation Hierarchies for Climate Modeling**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.

Overview: The objective of this workshop is to increase our understanding of the climate system through developments of better consistent simulation model hierarchies. It will explore to what extent more simplified models and theories can be useful in reproducing, interpreting and conceptualizing the complex dynamics of the climate system. This will include models, theories, and simulation techniques that have emerged from statistical physics and mathematics.

Application/Registration: An application and registration form is available at <http://www.ipam.ucla.edu/programs/clws3>. Applications received by Mar. 8, 2010, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

Organizing Committee: Markos Katsoulakis, Alan Kerstein, Boualem Khouider, Olivier Pauluis, Ole Peters, Pier Siebesma.

17-20 **25th Annual Shanks Lecture and Conference: Optimal Configurations on the Sphere and Other Manifolds**, Vanderbilt University, Nashville, Tennessee.

Description: The aim of this conference is to bring together mathematicians and scientists for the purpose of gaining a better understanding of the structure of particle systems under a variety of physical constraints. These include, for example, classical ground states for interacting particle systems, best-packing, random packings, jammed states, granular and colloidal systems, as well as minimal discrete and continuous energy problems for general kernels.

Information: <http://www.math.vanderbilt.edu/~shanks2010>.

* 22-23 **AMS Eastern Section Meeting**, New Jersey Institute of Technology, Newark, New Jersey.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

23-26 **SIAM Conference on Mathematical Aspects of Materials Science (MS10)**, Doubletree Hotel Philadelphia, Philadelphia, Pennsylvania. (Aug. 2009, p. 864)

Description: This conference is sponsored by the SIAM Activity Group on Mathematical Aspects of Materials Science.

Information: <http://www.siam.org/meetings/ms10/>.

24-28 **Applied Linear Algebra—in Honor of Hans Schneider**, Department of Mathematics, Faculty of Science, Novi Sad, Serbia. (Aug. 2009, p. 864)

Description: Inspired by the success of two previous conferences Applied Linear Algebra—in honor of Richard Varga, 2005, Palić; and Applied Linear Algebra—in honor of Ivo Marek, 2008, Novi Sad we will continue in the same fashion by organizing a conference Applied Linear Algebra—in honor of Hans Schneider. ALA 2010 has the similar aim as ALA 2005 and ALA 2008—to review numerous contributions of Hans Schneider and to report and discuss recent progress through the participation of international leaders in the field, who will gather in his honor. We are pleased to announce the 10th GAMM Workshop Applied and Numerical Linear Algebra with special emphasis on Positivity which will be organized as a part of ALA 2010. A special issue of Linear Algebra and its Applications will be devoted to selected papers presented during the conference.

Information: <http://www.dmi.uns.ac.rs/events/ala2010>.

* 24-28 **Data Hierarchies for Climate Modeling**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.

Description: This workshop will examine 1) basic paradigms for modeling hierarchical relationships, 2) the application of these paradigms

to facilitate the formulation of hierarchies for understanding climate processes, 3) their application to equation, model, and simulation hierarchies given a priori, 4) quantification and propagation of data-based modeling errors and uncertainties through the hierarchies, 5) interdisciplinary issues arising from the data collected or generated in climate science.

Application/Registration: An application and registration form is available at <http://www.ipam.ucla.edu/programs/clws4>. Applications received by Mar. 29, 2010, will receive fullest consideration. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission and we welcome their applications. You may also simply register and attend without IPAM funding.

Organizing Committee: Amy Braverman, Illia Horenko, Luis Kornbluh, Robert Pincus.

25-28 **8th AIMS Conference on Dynamical Systems, Differential Equations and Applications**, Dresden, Germany. (Jun./Jul. 2009, p. 770)

Plenary Speakers: Luis Caffarelli, Emmanuel Candes, Kuo-Chang Chen, Barbara Gentz, Louis Nirenberg, Masaharu Taniguchi, Gunther Uhlmann, Lai-Sang Young

Organizers: The American Institute of Mathematical Sciences, Dresden University of Technology.

Information: Stefan Siegmund, stefan.siegmund@tu-dresden.de; Shouchuan Hu, shu@missouristate.edu; Xin Lu, lux@uncw.edu; <http://aimsciences.org/AIMS-Conference/2010/>.

25-29 **BALWOIS 2010: Fourth International Scientific Conference**, Ohrid, Republic of Macedonia. (Jun./Jul. 2009, p. 771)

Description: Conference on Water Observation and Information System for Decision Support. Scientific presentations, Forum exchange, Workshops, Exhibition, Social program, etc.

Main topics: Climate and hydrology, environment and human activities, water related risks, integrated water resources management, ecohydrology, computing and technologie.

Deadlines: Submission of Abstract: November 15, 2009. Author Notification of Abstract Acceptance: December 15, 2009. Submission of Full Paper: February 15, 2010. Author Notification of Full Paper Acceptance: March 15, 2010.

Supporters: Ministry of Environment of Republic of Macedonia, French Ministry of Ecology, French Embassy in Macedonia, and International Association of Hydrological Sciences

Information: email: secretariat@balwois.com; <http://www.balwois.com/2010>. Project website: <http://www.balwois.com>.

June 2010

1-5 **IMA Workshop: Natural Locomotion in Fluids and on Surfaces: Swimming, Flying, and Sliding**, Institute for Mathematics and its Applications (IMA), University of Minnesota, Minneapolis, Minnesota. (Apr. 2009, p. 526)

Description: Natural locomotion in fluids includes the swimming of fish and microorganisms and the flying of birds and insects. Other creatures employ similar movements on solid and fluid surfaces, e.g., snails, snakes, and water striders. Nature has exploited the complex fluid dynamics of time-dependent three-dimensional flows over a wide range of Reynolds numbers to evolve a variety of interesting mechanisms of locomotion. This workshop will focus on the mechanics of these behaviors and the current state of theoretical and experimental work in the field. The scope will cover the dynamics from low to high Reynolds numbers, emphasizing the links between the fluid dynamics and the nature of the evolved mechanisms. The inclusion of movement over solid and fluid surfaces introduces new phenomena involving surface stresses and complex fluid layers.

Information: <http://www.ima.umn.edu/2009-2010/W6.1-5.10/>.

2–5 **Number Theory and Representation Theory—A conference in honor of Dick Gross' 60th birthday**, Science Center, Harvard University, Cambridge, Massachusetts. (Jun./Jul. 2009, p. 771)

Description: A conference focusing on the many exciting interactions between number theory and representation theory.

Speakers: Manjul Bhargava, Henri Darmon, Samit Dasgupta, Noam Elkies, Wee-Teck Gan, Joe Harris, Mike Hopkins, Nick Katz, Curt McMullen, Steve Kudla, Dipendra Prasad, Mark Reeder, Gordan Savin, Doug Ulmer, Marie-France Vigneras, Jiu-Kang Yu, Don Zagier, and Shou-Wu Zhang. On the evening of June 4th, 2010, there will be a dinner in honor of Dick Gross' 60th birthday.

Information: http://www.math.harvard.edu/conferences/gross_10/index.html.

17–19 **Coimbra Meeting on 0-1 Matrix Theory and Related Topics**, Department of Mathematics, University of Coimbra, Portugal. (Jun./Jul. 2009, p. 771)

Description: Matrices with entries consisting only of zeros and ones, whose entry sums of rows and columns are constrained, play an active role in modern mathematics and its applications, extending far beyond their natural context of Matrix Theory, Combinatorics, or Graph Theory. The purpose of this meeting is to bring together mathematicians from different areas with a view to exploring a number of new properties on the set $A(R,S)$, whose insertion tableau has a previously-fixed shape, and identifying fruitful avenues for further research. In spite of their extremely demanding nature, recent developments and procedures have evidenced a remarkable elegance and beauty, strengthening the interdisciplinary approach of the issue. It is the purpose of this meeting to attract more mathematicians to this exciting and important area, and to foster collaborations with other scientific users. This meeting is endorsed by the International Linear Algebra Society-ILAS.

Information: <http://www.mat.uc.pt/~cmf/01MatrixTheory>.

18–August 15 **Geometry, Topology, and Dynamics of Character Varieties**, Institute for Mathematical Sciences, National University of Singapore, Singapore. (Aug. 2009, p. 864)

Description: This program concerns character varieties of representations in a Lie group G of a discrete group π , for example, the fundamental group of a surface. These varieties have rich geometry and are related to interesting topological objects such as locally homogeneous geometric structures on manifolds, and moduli spaces arising in gauge theory. When π is the fundamental group of a surface group S , the mapping class group acts with a complicated and mysterious dynamics.

Information: <http://www.ims.nus.edu.sg/Programs/010geometry/index.htm>.

21–26 **“Alexandru Myller” Mathematical Seminar Centennial Conference**, “Al. I. Cuza” University of Iași, Romania. (Jun./Jul. 2009, p. 771)

Description: The Conference is a centennial celebration of the “Alexandru Myller” Mathematical Seminar of the “Al. I. Cuza” University of Iași. This celebration is also part of the anniversary of 150 years from the founding of the University of Iași. The Mathematical Seminar was founded in 1910 by the late Professor A. Myller, who obtained his Ph.D. degree at Göttingen in 1907. Besides a general session dedicated to the history of the Mathematical Seminar, there will be several sessions on the basic branches of mathematics listing both invited and contributed presentations.

Organizing Committee: Professors Viorel Barbu (chairman), Radu Miron, Constantin Corduneanu, Ovidiu Cârjă, Răzvan Lițcanu, Marius Durea. All current and former members of the “A. Myller” Mathematical Seminar are invited to participate. The invitation is also extended to all interested persons from the international mathematical community.

Information: <http://www.math.uaic.ro/~Myller2010>.

26–30 **2010 International Conference on Topology and its Applications**, Nafpaktos, Greece. (Jun./Jul. 2009, p. 771)

Description: The Department of Mathematics of the University of Patras and the Department of Telecommunication Systems and Networks of the T.E.I. of Messologhi with the hospitality of the city of Nafpaktos organize the 2010 International Conference on Topology and its Applications. All areas of Topology and its Applications are included (General topology, set-theoretic topology, geometric topology, algebraic topology, applied topology. In particular, topological groups, dimension theory, dynamical systems and continua theory, computational topology, history of topology). The conference is the continuation of the 2006 International Conference on Topology and its Applications (see <http://www.math.upatras.gr/~aegion>).

Organizing Committee: S. D.Iliadis (Chairman), D. N. Georgiou, I. E. Kougias, Th. Papathanasis.

Information: <http://www.math.upatras.gr/~nafpaktos/>; email: nafpaktos@math.upatras.gr.

28–July 2 **The Józef Marcinkiewicz Centenary Conference (JM 100)**, A. Mickiewicz University, Faculty of Mathematics and Computer Science, Poznań, Poland. (Aug. 2009, p. 864)

Description: On the occasion of the upcoming centenary of birth of Józef Marcinkiewicz (1910–1940) the Faculty of Mathematics and Computer Science of Adam Mickiewicz University is organizing a scientific conference to commemorate one of the most eminent Polish mathematicians. The meeting will be devoted to some significant aspects of contemporary mathematical research related to Marcinkiewicz's scientific interests (real, complex and functional analysis, probability theory) including their applications.

Confirmed Plenary Speakers: Krzysztof Bogdan, Michael Cwikel, Tadeusz Iwaniec, Jean-Pierre Kahane, Nigel Kalton, Michael Lacey, Rafal Latała, Tomasz Łuczak, Lech Maligranda, Gilles Pisier, Andreas Seeger, Marc Yor, and Bernard Roynette.

Information: <http://www.jm100.amu.edu.pl>.

July 2010

* 12–August 6 **Statistical Challenges Arising from Genome Resequencing**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Organizers: D. Balding (Imperial College London), C. Holmes (Oxford), G. McVean (Oxford) and M. Stephens (Chicago).

Description: The current generation of high-throughput genetic and genomic platforms, has had a great impact on biomedical research, and given new impetus to studies of molecular mechanisms of genetic disease, and to systems biology. The next big technological step forward is the advent of cheap, fast, sequencing platforms that will allow near-complete genome sequences to be quickly and affordably obtained from individual members of any species. Individual genomes from humans, their pathogens and model organisms will have an enormous impact on population genetics and evolutionary theory, as well as on epidemiology, particularly our understanding of infectious disease. We plan to discuss the most pressing open problems and the most promising avenues of future research necessary to deliver the full benefits of genome resequencing.

Information: <http://www.newton.ac.uk/programmes/CGR/>.

12–15 **SIAM Conference on the Life Sciences (LS10)**, The David L. Lawrence Convention Center, Pittsburgh, Pennsylvania. (Apr. 2009, p. 526)

Description: This conference is organized by the SIAM Activity Group on the Life Sciences.

Information: <http://www.siam.org/meetings/ls10/>.

12–16 **2010 SIAM Annual Meeting (AN10)**, The David L. Lawrence Convention Center, Pittsburgh, Pennsylvania. (Apr. 2009, p. 526)

Description: SIAM's Annual Meeting provides a broad view of the state of the art in applied mathematics, computational science, and

their applications through invited presentation, prize lectures, mini-symposia, and contributed papers and posters.

Information: <http://www.siam.org/meetings/an10/index.php>.

* 19–August 13 **Gyrokinetics in Laboratory and Astrophysical Plasmas**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Organizers: W. Dorland (Maryland), S. Nazarenko (Warwick) and A. Schekochihin (Oxford).

Description: In the last 25 years, a new mathematical approach, gyrokinetics, has been developed to treat low-frequency fluctuations in plasmas. In this approach, the fast orbital “gyromotion” is averaged to produce kinetic equations for rings of charge. This is a mathematically rigorous description that is far more tractable than the full kinetic theory. Despite some practical successes in code-building and simulations, the mathematical properties and physical implications of gyrokinetics are insufficiently well understood. In space and astrophysics, the wide applicability and power of the gyrokinetic theory has yet to be fully recognised and exploited. To realise the benefits of this approach, it is essential that gyrokinetics be put on a firm mathematical and physical footing. This program will include several workshops.

Information: <http://www.newton.ac.uk/programmes/GYP/ws.html>.

26–30 **6th International Conference on Lévy Processes: Theory and Applications**, Technical University of Dresden, Dresden, Germany. (Apr. 2009, p. 526)

Description: The focus is on recent developments in the theory of Lévy and jump processes and their applications. There will be invited talks and poster sessions.

Scientific Committee: Jean Bertoin (Paris VI, France), Serge Cohen (Toulouse, France), Davar Khosnevisan (Utah, USA), Andreas Kyprianou (Bath, UK), Alexander Lindner (Braunschweig, Germany), Makoto Maejima (Keio, Japan), Thomas Mikosch (Copenhagen, Denmark), Victor Pérez-Abreu (CIMAT, Mexico), Jan Rosinski (U. Tennessee, USA), Réne Schilling (Dresden, Germany).

Information: <http://www.math.tu-dresden.de/levy2010>; email: levy2010@tu-dresden.de. It is also possible to contact: Réne Schilling (TU Dresden) or Alexander Lindner (TU Braunschweig) directly.

26–August 6 **Winter School on Topics in Noncommutative Geometry**, Departamento de Matematica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina. (Apr. 2009, p. 526)

Description: The school will cover different topics in non-commutative geometry and its connections with other areas of mathematics and physics, such as operator index theory, strings, representations, operator algebras, and K-Theory. As of December 2008, the following people have agreed in principle to come and give a course: Henrique Bursztyn, Joachim Cuntz, Pavel Etingof, Victor Ginzburg, Victor Kac, Max Karoubi, Henri Moscovici, Holger Reich, Nicolai Reshetikhin, Marc Rieffel, Jonathan Rosenberg, Georges Skandalis, Boris Tsygan.

Organizers: G. Cortiñas, M. Farinati, J. A. Guccione, J. J. Guccione, M. Graña.

Scientific Committee: G. Cortiñas, J. Cuntz, B. Tsygan.

Information: <http://cms.dm.uba.ar/Members/gcorti/workgroup.GNC/3EILS>.

August 2010

8–11 **Functional Analysis and Operator theory**, Indian Statistical Institute, Bangalore, India. (Aug. 2009, p. 864)

Local Organizing Committee: T. S. S. R. K. Rao (ISI, Bangalore), G. Misra (IISc, Bangalore), S. H. Kulkarni (IIT, Chennai), P. Bandyopadhyay (ISI, Kolkata), T. Bhattacharya (IISc, Bangalore), N. Namboodiri (CUSAT, Cochin), S. Dutta (IIT, Kanpure).

Information: Conference email: ramanuj@isibang.ac.in; <http://www.isibang.ac.in/~statmath/conferences/icmfasat/icm.htm>. Registration fee: 100 Euros.

* 11–December 22 **Mathematical and Statistical Approaches to Climate Modelling and Prediction**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: Our best estimates of future climate are based on the use of complex computer models that do not explicitly resolve the wide variety of spatio-temporal scales making up Earth’s climate system. The non-linearity of the governing physical processes allows energy transfer between different scales, and many aspects of this complex behaviour can be represented by stochastic models. However, the theoretical basis for so doing is far from complete. Many uncertainties remain in predictions derived from climate models, yet governments are increasingly reliant on model predictions to inform mitigation and adaptation strategies. An overarching aim of climate scientists is to reduce the uncertainty in climate predictions and produce credible assessments of model accuracy. Several workshops will take place during this program.

Information: <http://www.newton.ac.uk/programmes/CLP/ws.html>.

12–15 **International Conference on Recent Trends in Graph Theory and Combinatorics, ICRTGC-2010**, Cochin, India. (Jun./Jul. 2009, p. 771)

Information and Location: This conference is a Satellite Conference of the International Congress of Mathematicians to be held at Hyderabad, India, from August 19–27, 2010, <http://www.icm2010.in>.

Programme: The academic programme will consist of plenary and invited talks by eminent researchers in the field of Graph theory, Combinatorics and related topics, contributed presentations and mini symposia/special sessions on specific themes such as Algebraic Graph Theory, Metric Graph Theory and Graph Products, Graph Labeling and Graph Operators.

Contact: Ambat Vijayakumar, Convener ICRTGC-2010, Department of Mathematics, Cochin University of Science and Technology, Cochin-682 022 India. Email: icrtgc2010@gmail.com; icrtgc2010@cusat.ac.in. <http://icrtgc2010.cusat.ac.in/>.

16–December 17 **MSRI Future Scientific Programs: Inverse Problems and Applications**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 864)

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

16–December 17 **MSRI Future Scientific Programs: Random Matrix Theory, Interacting Particle Systems and Integrable Systems**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 864)

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

* 16–December 22 **Partial Differential Equations in Kinetic Theories**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Organizers: J. A. Carrillo (Barcelona), S. Jin (Wisconsin) and P. A. Markowich (Cambridge).

Description: The main objective of this program is aimed at advancing Partial Differential Equations (PDEs) research in kinetic theories and its impact in the applied sciences highlighting selected modern application areas. This effort has to be understood from a global perspective of research in PDEs bringing together mathematical modelling, analysis, numerical schemes, and simulation in a feedback loop of synergies. The three selected newly emerging application areas of kinetic theories are kinetic modelling in biology, coupled fluid-particle models, and PDE Models for quantum fluids. Several workshops will take place during the program.

Information: <http://www.newton.ac.uk/programmes/KIT/ws.html>.

20–25 **Third International Conference on Boundary Value Problems, Integral Equations and Related Problems**, Beijing and Baoding, Hebei, China. (Aug. 2009, p. 864)

Topics: The conference will be about the following six subjects: 1) Various boundary value problems for partial differential equations and functional equations; 2) The theory and methods of integral equations and integral operators including singular integral equations; 3) Applications of boundary value problems and integral equations to mechanics and physics; 4) Numerical methods of integral equations and boundary value problems; 5) Theory and methods for inverse problems of mathematical physics; 6) Clifford analysis and some related problems with above subjects.

Information: More detailed information can be found at <http://www.math.pku.edu.cn/3inter.conf-bvp.ie.rps> or please contact G. C. Wen, School of Math. Sci., Peking Univ., Beijing 100871, China; tel:008610-62755937; fax: 008610-62751801; email: wengc@pku.edu.cn or wengc@math.pku.edu.cn.

23–27 **International Workshop on Geodesics**, Chern Institute of Mathematics, Nankai University, Tianjin, China. (Jun./Jul. 2009, p. 771)

Description: This joint workshop of the American Institute of Mathematics (AIM) and the Chern Institute of Mathematics (CIM), sponsored by AIM, CIM, and the NSF, will be devoted to the study of the behavior of geodesics in the large. Although this is an old subject, with important contributions first made by J. Hadamard and H. Poincaré, many of the fundamental problems are still open.

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

31–September 4 **Permanents and modeling probability distributions**, American Institute of Mathematics, Palo Alto, California. (Jun./Jul. 2009, p. 771)

Description: This workshop, sponsored by AIM and the NSF, will study the problem of estimating a probability distribution from a small data sample it generates. The workshop will investigate consolidating a theoretical and algorithmic framework for this topic.

Information: <http://aimath.org/ARCC/workshops/permanents.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.

October 2010

* 2–3 **AMS Eastern Section Meeting**, Syracuse University, Syracuse, New York.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

* 9–10 **AMS Western Section Meeting**, University of California, Los Angeles, California.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

26–29 **SIAM Conference on Applied Linear Algebra (LA09)**, Embassy Suites Hotel, Monterey Bay-Seaside, California.

Description: Linear algebra is an important area of mathematics and it is at the heart of many scientific, engineering, and industrial applications. Research and development in linear algebra include theoretical studies, algorithmic designs and implementations on advanced computer architectures, and applications to various disciplines. The SIAM Conferences on Applied Linear Algebra, organized by SIAM every three years, are the premier international conferences on applied linear algebra, which bring together diverse researchers and practitioners from academia, research laboratories, and industries all over the world to present and discuss their latest work and results on applied linear algebra.

Information: <http://www.siam.org/meetings/la09/>.

* 29–31 **AMS Central Section Meeting**, Notre Dame University, Notre Dame, Indiana.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

November 2010

* 6–7 **AMS Southeastern Section Meeting**, University of Richmond, Richmond, Virginia.

Information: <http://www.ams.org/amsmtgs/sectional.html>.

December 2010

25–27 **International Conference on Current trends in Mathematics**, Allahabad, Uttar Pradesh, India. (May 2009, p. 659)

Description: The aim of the conference is to introduce undergraduate and Ph.D. students in mathematics as well as post-doctoral researchers in recently emerged trends of mathematics.

Deadline: For submitting abstracts with full-length paper to complexgeometry18@yahoo.com: October 20, 2010. Acknowledgement of accepted papers by email: October 25, 2010. For registration: November 15, 2010. All submitted papers will be under peer review and accepted papers will be published in the conference proceeding.

Information: Contact: complexgeometry18@yahoo.com.

January 2011

10–May 20 **MSRI Future Scientific Programs: Arithmetic Statistics**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 864)

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

10–May 20 **MSRI Future Scientific Programs: Free Boundary Problems, Theory and Applications**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2009, p. 864)

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