
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/>.

March 2013

* 1-3 **History and Pedagogy of Mathematics (HPM) Americas Section 2013 East Coast Meeting**, United States Military Academy, West Point, New York.

Description: Special features of this meeting include a visit to the Academy's rare book collections. This is the only call for papers to be presented at the meeting. HPM seeks a variety of talks on relations between the history and pedagogy of mathematics. Talks will be about 30 minutes long. Prospective speakers should send a title and abstract, as well as their own contact information, to Fred Rickey at fred.rickey@me.com by February 15, 2013. Contact Amy Ackerberg-Hastings, aackerbe@verizon.net, for information on registration.

Information: <http://www.hpm-americas.org>.

1-3 **2013 Spring Southeastern Section Meeting**, University of Mississippi, Oxford, Mississippi. (Sept. 2012, p. 1170)

2-3 **36th Annual Texas Partial Differential Equations Conference**, The University of Texas at El Paso, El Paso, Texas. (Dec. 2012, p. 1591)

4-6 **The First International Conference on Green Computing, Technology and Innovation (ICGCTI2013)**, The Asia Pacific University of Technology and Innovation (APU), Kuala Lumpur, Malaysia. (Dec. 2012, p. 1591)

4-6 **The Second International Conference on e-Technologies and Networks for Development (ICeND 2013)**, The Asia Pacific Univer-

sity of Technology and Innovation (APU), Kuala Lumpur, Malaysia. (Dec. 2012, p. 1591)

4-8 **Forty-Fourth Southeastern International Conference on Combinatorics, Graph Theory and Computing**, Florida Atlantic University, Boca Raton, Florida. (Oct. 2012, p. 1302)

4-8 **ICERM Workshop: Whittaker Functions, Schubert Calculus and Crystals**, ICERM, Providence, Rhode Island. (Sept. 2012, p. 1170)

* 9-10 **3rd Ohio River Analysis Meeting (ORAM-III)**, University of Cincinnati, Cincinnati, Ohio.

Description: This is the third edition of an annual meeting hosted in alternation by the University of Cincinnati and the University of Kentucky. The program traditionally covers a broad spectrum of topics in analysis and partial differential equations.

Featured speakers: Rodrigo Banuelos (Purdue), Tanya Christiansen (Missouri), Robert Hardt (Rice), Steve Hofmann (Missouri), Alexei Poltoratski (Texas A&M). In addition to the featured speakers there will be contributed half-hour talks.

Funding: From the National Science Foundation is available for junior participants.

Information: <http://math.uc.edu/ORAM/index.html>.

* 11-June 14 (NEW DATE) **Dynamics of Groups and Rational Maps**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.

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/>.

Description: In recent years, dynamical properties of group actions have seen many applications to areas as diverse as rational maps, geometry, low dimensional and geometric topology, number theory. Such applications have motivated a rapid development of new tools within the area of dynamical systems, which in turn were used as essential ingredients in solutions to long-standing open conjectures in seemingly unrelated areas of mathematics. The most recent such application is the solution of the virtual fibred conjecture for closed hyperbolic 3-manifolds. The goal of the workshop is to bring together leading contributors to these recent developments in the theory of dynamical systems as well as young researchers who are interested in exploring the interplay between different fields from the viewpoint of dynamical systems.

Information: <http://www.ipam.ucla.edu/programs/iagws2/>.

11–14 **Interactions between Analysis and Geometry**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Oct. 2011, p. 1325)

12–15 **Interactions Between Analysis and Geometry Tutorials**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2013, p. 113)

13–15 **IAENG International Conference on Operations Research 2013 (ICOR'13)**, Royal Garden Hotel, Hong Kong, China. (Sept. 2012, p. 1170)

15–16 **29th Southeastern Analysis Meeting (SEAM 2013)**, Virginia Tech, Blacksburg, Virginia. (Dec. 2012, p. 1591)

18–22 **Analysis on Metric Spaces**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2013, p. 113)

18–22 **84th Annual Meeting of GAMM (The International Association of Applied Mathematics and Mechanics)**, University of Novi Sad, Novi Sad, Serbia. (Sept. 2012, p. 1170)

* 18–22 **Hot Topics: Surface subgroups and cube complexes**, Mathematical Sciences Research Institute (MSRI), Berkeley, California.

Description: Recently there has been substantial progress in our understanding of the related questions of which hyperbolic groups are cubulated on the one hand, and which contain a surface subgroup on the other. The most spectacular combination of these two ideas has been in 3-manifold topology, which has seen the resolution of many long-standing conjectures. In turn, the resolution of these conjectures has led to a new point of view in geometric group theory, and the introduction of powerful new tools and structures. The goal of this conference will be to explore the further potential of these new tools and perspectives, and to encourage communication between researchers working in various related fields.

Organizers: Ian Agol (University of California, Berkeley), Danny Calegari (University of Chicago), Ursula Hamenstet (University Bonn), Vlad Markovic (California Institute of Technology).

Information: <https://www.msri.org/web/msri/scientific/show/-/event/Wm9922>

18–22 **Masterclass: Soergel bimodules and Kazhdan-Lusztig conjectures by Williamson and Elias**, QGM, Aarhus University, Aarhus, Denmark. (Dec. 2012, p. 1591)

* 18–28 **MECC 2013—International Conference and Advanced School Planet Earth, Mathematics of Energy and Climate Change**, Calouste Gulbenkian Foundation (FCL) and Faculdade de Ciências, Universidade Lisboa (FCUL), Lisbon, Portugal.

Description: The first two volumes of the CIM Series in Mathematical Sciences published by Springer-Verlag will consist of selected works presented in the conferences Mathematics of Planet Earth (CIM-MPE). The editors of these first two volumes are Jean-Pierre Bourguignon, Rolf Jeltsch, Alberto Pinto, and Marcelo Viana.

Keynote speakers and school lecturers: Inês Azevedo, Carnegie Mellon University, USA; Richard James, University of Minnesota, USA; Christopher K. R. T. Jones, University of North Carolina, USA; Pedro Miranda, Universidade de Lisboa, Portugal; Keith Promislow, Michigan State University, USA; Richard L. Smith, University of North Carolina, USA; José Xavier, Universidade de Coimbra, Portugal; David Zilberman, University of California, Berkeley, USA.

Information: <http://sqig.math.ist.utl.pt/cim/mpe2013/MECC>.

20–22 **17th International Conference on Discrete Geometry for Computer Imagery (DGCI 2013)**, Escuela Tecnica Superior de Ingenieria Informatica, Univ. de Sevilla, Seville, Spain. (Sept. 2012, p. 1170)

25–27 **7th IMA Conference on Quantitative Modelling in the Management of Health and Social Care**, Central London College, London, United Kingdom. (Sept. 2012, p. 1170)

25–29 **4th International conference “Function spaces. Differential operators. General topology. Problems of mathematical education”**, Peoples’ Friendship University of Russia (PFUR), Moscow, Russia. (Jan. 2013, p. 113)

25–29 **AIM Workshop: Mathematical problems arising from biochemical reaction networks**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1170)

25–29 **Master class on geometry and Teichmüller theory**, Erwin Schrödinger Institute, Vienna, Austria. (Jan. 2013, p. 113)

25–29 **Teichmüller theory: A quantization and relations with physics**, Erwin Schrödinger Institute, Vienna, Austria. (Feb. 2013, p. 261)

29 **Columbia-Princeton Probability Day 2013**, Princeton University, Princeton, New Jersey. (Feb. 2013, p. 261)

April 2013

1–5 **AIM Workshop: Gromov-Witten invariants and number theory**, American Institute of Mathematics, Palo Alto, California. (Jan. 2013, p. 113)

1–26 **Modular Representation Theory of Finite and p-adic Groups**, Institute for Mathematical Sciences, National University of Singapore, Singapore. (Jan. 2013, p. 113)

3–6 **Recreational Mathematics Colloquium III**, University of Azores, Ponta Delgada, Portugal. (Jan. 2013, p. 113)

4–6 **38th Arkansas Spring Lecture Series in the Mathematical Sciences: “Extension and Interpolation of Functions”**, University of Arkansas, Fayetteville, Arkansas. (Nov. 2012, p. 1480)

5–6 **3rd International Conference on E-Learning and Knowledge management Technology (ICEKMT 2013)**, Hotel Ramada, Bangkok, Thailand. (Dec. 2012, p. 1592)

* 6–7 **11th Annual Graduate Student Topology and Geometry Conference**, University of Notre Dame, Notre Dame, Indiana.

Description: This conference provides a space for graduate students to present their work in topology and geometry to each other. **Talks:** Talks by graduate students will make up the majority of the conference—students are invited to submit proposals for talks by February 10, 2013. Previous versions of this conference have been large, diverse and fun, and we expect 2013 to be no different. We will also have presentations by David Ayala (Harvard), Clark Barwick (MIT), Alessio Figalli (UT Austin), Dan Freed (UT Austin), Fernando Galaz-Garcia (Münster), Ana Rita Pires (Cornell), Gábor Székelyhidi (Notre Dame) and Burkhard Wilking (Münster).

Support: We expect to be able to provide some funding to students without alternative resources, thanks to an award from the National Science Foundation.

- Information:** Apply for funding or submit a talk proposal by February 10, 2013, at our website: <http://www.nd.edu/~conf/gstgc13>.
- 6–7 **2013 Spring Eastern Sectional Meeting**, Boston College, Chestnut Hill, Massachusetts. (Sept. 2012, p. 1170)
- 8–9 **IMA Mathematics in Finance**, Edinburgh Conference Centre, Heriot-Watt University, Edinburgh, United Kingdom. (Sept. 2012, p. 1170)
- 8–10 **Fourteenth International Conference on Numerical Combustion (NC13)**, Holiday Inn Riverwalk, San Antonio, Texas. (Sept. 2012, p. 1170)
- 8–12 **AIM Workshop: Geometric perspectives in mathematical quantum field theory**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1171)
- 8–12 **Interactions between Noncommutative Algebra, Representation Theory, and Algebraic Geometry**, Mathematical Sciences Research Institute, Berkeley, California. (Aug. 2011, p. 1014)
- 8–13 **International School and Research Workshop on Complex Systems**, Centre de Recerca Matemàtica, Bellaterra, Barcelona. (Feb. 2013, p. 261)
- 12–14 **Graduate Research Conference in Algebra and Representation Theory**, Kansas State University, Manhattan, Kansas. (Feb. 2013, p. 261)
- 13–14 **2013 Spring Western Section Meeting**, University of Colorado Boulder, Boulder, Colorado. (Sept. 2012, p. 1171)
- 13–14 **3rd IIMA International Conference on Advanced Data Analysis, Business Analytics and Intelligence**, Indian Institute of Management, Ahmedabad, India. (Apr. 2012, p. 593)
- 15–17 **Geomathematics 2013**, Hotel Haus am Weinberg, Sankt Martin, Palatinate, Germany. (Nov. 2012, p. 1480)
- 15–19 **ICERM Workshop: Combinatorics, Multiple Dirichlet Series and Analytic Number Theory**, ICERM, Providence, Rhode Island. (Sept. 2012, p. 1171)
- * 17–20 **Fifth Discrete Geometry and Algebraic Combinatorics Conference**, South Padre Island, Texas.
Description: The event is partially supported by the National Security Agency. This conference is a unique opportunity for Geometry and Combinatorics researchers to meet, share their specialized knowledge and learn from others.
Information: <http://blue.utb.edu/dg2013/>.
- 19–20 (NEW DATE) **New Frontiers in Numerical Analysis and Scientific Computing**, Kent State University, Kent, Ohio. (Nov. 2012, p. 1172. Formerly listed under April 12–13.)
- 19–21 **Underrepresented Students in Topology and Algebra Research Symposium**, Purdue University, West Lafayette, Indiana. (Jan. 2013, p. 113)
- 20 **2013 Great Lakes SIAM conference on “Computational Mathematics: Modeling, Algorithms and Applications”**, Central Michigan University, Mount Pleasant, Michigan. (Dec. 2012, p. 1592)
- 20–21 **Great Lakes Geometry Conference 2013**, Northwestern University, Evanston, Illinois. (Feb. 2013, p. 261)
- 22–25 **The Cape Verde International Days on Mathematics 2013 (CVIM’2013)**, University of Cape Verde, Praia, Cape Verde. (Feb. 2013, p. 261)
- 24–28 **Algebra, Combinatorics and Representation Theory: a conference in honor of the 60th birthday of Andrei Zelevinsky**, Northeastern University, Boston, Massachusetts. (Jan. 2013, p. 113)
- 26 **Philosophy of Information: The Value of Information**, American University, Washington, DC. (Oct. 2012, p. 1302)
- * 26–28 **International Conference on Recent Trends in Applied Sciences with Engineering Applications**, Truba Institute of Engineering & Information Technology, Bhopal (M.P.), India.
Description: RTASEA 2013 is intended to provide a common platform for researchers, scientists, engineers, and practitioners throughout the world to present their latest research findings, ideas, developments, and applications in the field of applied sciences, humanities, management, & engineering.
Important dates: Submission of manuscript up to February 20, 2013. Acceptance of manuscript up to February 28, 2013. Camera ready paper submission with copyright form: March 15, 2013. Manuscript submit to: rtasea@trubainstitute.ac.in, ramakant.bhardwaj@trubainstitute.ac.in.
Information: <http://rtasea.trubainstitute.ac.in>.
- 27–28 **2013 Spring Central Section Meeting**, Iowa State University, Ames, Iowa. (Sept. 2012, p. 1171)
- 29–May 1 **Mathematics of Planet Earth 2013. Establishing the scientific foundation for Quantitative Public Health Decision-Making: Linking surveillance, disease modeling, and simulation at the Fields Institute**, FIELDS, Toronto, Canada. (Sept. 2012, p. 1171)
- 29–May 3 **Non-Smooth Geometry**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2013, p. 114)
- 29–May 10 **J-holomorphic Curves in Symplectic Geometry, Topology and Dynamics**, Centre de Recherches Mathématiques, Montréal, Canada. (Dec. 2012, p. 1592)
- 30–May 3 **Third Buea International Conference on the Mathematical Sciences**, University of Buea, Cameroon. (Dec. 2012, p. 1592)
- May 2013**
- 3–5 **Atkin Memorial Lecture and Workshop: Cohen-Lenstra Heuristics**, University of Illinois at Chicago, Chicago, Illinois. (Jan. 2013, p. 114)
- 5–9 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Major and Neglected Diseases in Africa**, Ottawa, Canada. (Sept. 2012, p. 1171)
- 6–10 **AIM Workshop: Algorithms for lattices and algebraic automorphic forms**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1171)
- 6–10 **The Commutative Algebra of Singularities in Birational Geometry: Multiplier Ideals, Jets, Valuations, and Positive Characteristic Methods**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1171)
- 7–11 **Analysis, Complex Geometry, and Mathematical Physics: A Conference in Honor of Duong H. Phong**, Columbia University, New York, New York. (Jan. 2013, p. 114)
- 9–11 **The International Conference on Technological Advances in Electrical, Electronics and Computer Engineering (TAECE2013)**, Mevlana University, Konya, Turkey. (Feb. 2013, p. 261)
- * 10–12 **Southeastern Lie Theory Workshop: Noncommutative Algebraic Geometry and Representation Theory**, Louisiana State University, Baton Rouge, Louisiana.
Description: The workshop will emphasize the interactions between representation theory of Lie algebras and groups and noncommutative algebraic geometry. In addition to invited talks, there will be two sessions of contributed talks.
Support: Modest support from the conference grant and LSU will be available to graduate students, postdocs, junior faculty, women, and members of underrepresented minority groups. Please contact one of the organizers before April 10, 2013, to apply for support. Graduate students are encouraged to share a hotel room with another participant.
Information: <http://www.math.lsu.edu/~brselie/>.

- 12–17 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program- Impact of climate change on biological invasions and population distributions**, BIRS, Banff, Canada. (Sept. 2012, p. 1172)
- 13–17 **AIM Workshop: Nonhomogeneous boundary-value problems for nonlinear waves**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1172)
- 19–23 **SIAM Conference on Applications of Dynamical Systems (DS13)**, Snowbird Ski and Summer Resort, Snowbird, Utah. (Oct. 2011, p. 1326)
- 19–24 **FEMTEC 2013 - 4th International Congress on Computational Engineering and Sciences**, Stratosphere Hotel, Las Vegas, Nevada. (Dec. 2012, p. 1592)
- 19–25 **15th International Conference on Functional Equations and Inequalities**, Ustron (near the borders with the Czech Republic and Slovakia), Poland. (Sept. 2012, p. 1172)
- 19–27 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Summer School on Mathematics of Infectious Disease**, York University, Toronto, Canada. (Sept. 2012, p. 1172)
- * 20–24 **NSF/CBMS Regional Conference in the Mathematical Sciences: Solitons in Two-Dimensional Water Waves and Applications to Tsunami**, The University of Texas–Pan American, Edinburg, Texas.
Description: Professor Yuji Kodama, Ohio State University, delivers a self-contained and comprehensive exposition on the new developments in the subjects of solitons in two-dimensional water waves and applications to tsunamis. The conference will bring together a diverse group of researchers and students who are interested in nonlinear waves, water waves, solitons, integrable systems and tsunamis.
Invited speakers: Professor Yuji Kodama (Principal Lecturer), Professor Mark J. Ablowitz, Professor Sarbarish Chakravarty, Professor Philippe Guyenne, Professor Taro Kakinuma, Professor Alex Kasman, Professor Tetsu Mizumachi, Professor Harvey Segur, Professor Lauren K. Williams, Professor Harry Yeh.
Information: <http://faculty.utpa.edu/kmaruno/nsfcbms-tsunami.html>.
- 20–24 **Quasiconformal Geometry and Elliptic PDEs**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California. (Jan. 2013, p. 114)
- 21–24 **Questions, Algorithms, and Computations in Abstract Group Theory**, University of Braunschweig, Germany. (Jan. 2013, p. 114)
- 22–24 **Algebra and Topology: A conference celebrating Lionel Schwartz's 60th birthday**, University of Nantes, France. (Feb. 2013, p. 261)
- 25–27 **10th Hstam International Congress on Mechanics**, Technical University of Crete, Chania, Crete, Greece. (Sept. 2012, p. 1172)
- 26–30 **The 19th International Conference on Difference Equations and Applications**, Sultan Qaboos University, Muscat, Oman. (Sept. 2012, p. 1172)
- 26–June 27 **Topological, Symplectic and Contact Spring in Toulouse**, Université Paul Sabatier, Toulouse, France. (Jan. 2013, p. 114)
- 27–31 **Control, index, traces and determinants: The journey of a probabilist. A conference related to the work of Jean-Michel Bismut**, Amphithéâtre Lehman Bâtiment 200 Université Paris-Sud F-91405, Orsay, France. (Jan. 2013, p. 114)
- 27–31 **Introductory week to the Topological, Symplectic and Contact Spring in Toulouse**, Université Paul Sabatier, Toulouse, France. (Jan. 2013, p. 114)
- 27–31 **Summer School on Topics in Space-Time Modeling and Inference**, Aalborg University, Department of Mathematical Sciences, Aalborg, Denmark. (Nov. 2012, p. 1481)
- 27–June 7 **Masterclass: (u,v,w knots)x(topology, combinatorics, low and high algebra) by Dror Bar-Natan (University of Toronto)**, QGM, Aarhus University, Aarhus, Denmark. (Dec. 2012, p. 1593)
- * 28–June 1 **Homotopical Methods in Algebraic Geometry**, University of Southern California, Los Angeles, California.
Organizers: Aravind Asok (USC), Eric Friedlander (USC), Christian Haesemeyer (UCLA), Mark Walker (UNL), and Chuck Weibel (Rutgers).
Speakers: Joseph Ayoub, Frederic Deglise, Jean Fasel, Thomas Geisser*, Uwe Jannsen, Bruno Kahn, Marc Levine, Alexander Merkurjev, Dmitri Orlov*, Pablo Pelaez, Shuji Saito, Vasudevan Srinivas, Andrei Suslin*, Goncalo Tabuada, Burt Totaro, Claire Voisin, Kirsten Wickelgren, Inna Zakharevich. * (pending confirmation).
Funding: Graduate students, post-docs, and others are encouraged to apply for funding, provided to us through an NSF grant.
Information: For additional information and to register, please visit <https://sites.google.com/site/hmag2013/>.
- 30 **“The first International Western Balkan Conference of Mathematical Sciences”**, Elbasan University, Elbasan, Albania. (Feb. 2013, p. 261)
- 30–June 1 **Dynamical systems and statistical physics (91th Encounter between Mathematicians and Theoretical Physicists)**, Institut de Recherche Mathématique Avancée, Strasbourg, France. (Dec. 2012, p. 1593)
- * 30–June 1 **Geometry and Physics 2013 (GAP 2013)**, Centre de Recherches Mathématiques, Montréal, Québec, Canada,
Speakers: Philip Boalch (Ecole Normale Supérieure & CNRS), Sergey Cherkis (University of Arizona), Tamas Hausel (EPF Lausanne), Andrew Neitzke (University of Texas at Austin), Lauren Williams (UC Berkeley).
Organizers: Marco Gualtieri (Toronto), Spiro Karigiannis (Waterloo), Ruxandra Moraru (Waterloo), Johannes Walcher (McGill), McKenzie Wang (McMaster).
Information: <http://www.math.uwaterloo.ca/~gap/>.
- * 30–June 2 **International Conference on Topological Algebras and their Applications (shortly ICTAA 2013)**, University of Tartu, Tartu, Estonia.
Description: The forthcoming conference will be the seventh in the series of international conferences on Topological Algebras and their Applications. The previous ones were held at Tartu (1999), Rabat (2000), Oulu (2001), Oaxaca (2002), Athens (2005) and Tartu (2008). The present international conference, dedicated to the 70th birthday of Professor Emeritus Mati Abel, will be organized in Tartu in the end of May by the Institute of Mathematics at the University of Tartu and the Estonian Mathematical Society.
Topics: The topics of the conference are all areas of mathematics, connected with (preferably general) topological algebras and their applications included every kind of topological-algebraic structures as topological linear spaces, rings, modules, groups and semigroups; bornological-algebraic structures as bornological linear spaces, algebras, groups, rings and modules; algebraical and topological K-theory; topological module bundles and others. The objective of the present conference is to bring together experts and young researchers on these fields of mathematics. The programme of the conference will consist of 30-minutes lectures and contributed 20-minutes talks if necessary, then also poster sessions as well as short presentations.
Information: <http://ictaa2013.ut.ee/>.

June 2013

- * 2–5 **International Conference on Applied Analysis and Mathematical Modelling (ICAAMM2013)**, Yildiz Technical University, Davut Pasa Campus, Istanbul, Turkey.
Description: The international conference on Applied Analysis and Mathematical Modelling (ICAAMM2013) is jointly organized by Yildiz

- Technical University, University Putra Malaysia and Malaysian Mathematical Sciences Soc.
Information: <http://www.ica13.yildiz.edu.tr>
- 2–8 **8th Spring School on Analysis**, Paseky nad Jizerou, Czech Republic. (Jan. 2013, p. 114)
- 3–7 **GESTA 2013 (Topological, Symplectic and Contact Spring in Toulouse)**, Université Paul Sabatier, Toulouse, France. (Jan. 2013, p. 114)
- 3–7 **MEGA 2013: Effective Methods in Algebraic Geometry**, Goethe University, Frankfurt am Main, Germany. (Sept. 2012, p. 1172)
- 3–9 **Summer school on Finsler geometry with applications to low-dimensional geometry and topology**, Department of Mathematics, University of the Aegean, Karlovassi, Island of Samos, Greece. (Dec. 2012, p. 1593)
- 3–14 **Moduli Spaces and their Invariants in Mathematical Physics**, Centre de Recherches Mathématiques, Montréal, Canada. (Feb. 2013, p. 262)
- 3–July 12 **Nonlinear expectations, stochastic calculus under Knightian uncertainty, and related topics**, Institute for Mathematical Sciences, National University of Singapore, Singapore. (Oct. 2012, p. 1303)
- 3–28 **Focus Program on Noncommutative Geometry and Quantum Groups**, Fields Institute for Research in Mathematical Sciences, Toronto, Ontario, Canada. (Sept. 2012, p. 1172)
- 4–14 **Conference on Nonlinear Mathematical Physics: Twenty Years of JNMP**, The Sophus Lie Conference Center, Nordfjordeid, Norway. (Sept. 2012, p. 1173)
- 5–9 **4th Novi Sad Algebraic Conference–NSAC 2013**, Department of Mathematics and Informatics, Faculty of Science, University of Novi Sad, Novi Sad, Serbia. (Sept. 2012, p. 1173)
- * 7–12 **XVth International Conference on Geometry, Integrability and Quantization**, Sts. Constantine and Elena Resort, near Varna, Bulgaria.
Description: This conference is next in a row of previous meetings on geometry and mathematical physics which took place in Bulgaria — Zlatograd (1995) and the annual conferences under the same title held in Varna from 1998 to 2012.
Aim: To bring together experts in classical and modern differential geometry, complex analysis, mathematical physics, and related fields to assess recent developments in these areas and to stimulate researches in related topics.
Principal speakers: George Bluman, Some Recent Developments in Finding Systematically Conservation Laws; and Nail H. Ibragimov, Group Analysis as a Microscope of Mathematical Modeling.
Information: <http://www.bio21.bas.bg/conference/>
- * 8–13 **39th International Conference “Applications of Mathematics in Engineering and Economics” — AMEE’13**, Technical University Leisure House, Sozopol, Bulgaria.
Description: The 39th International Conference AMEE’13 is organized by the Faculty of Applied Mathematics and Informatics at the Technical University of Sofia, Bulgaria. The aim of the conference is to provide an overview of the “hot topics” in Applied Mathematics and to bring together young researchers and senior scientists and at the same time to create a forum for exchange of new scientific ideas. The invited lectures will be presented in general sessions and the contributed talks in separate sessions on the following topics:
Topics: Mathematical analysis and applications, differential equations, differential geometry, numerical methods and mathematical modeling, statistics, probability theory, operations research, economics and financial mathematics, software innovations in scientific computing, E-learning. The conference post-proceedings will be published only after peer reviewing by the American Institute of Physics (AIP).
- Information:** http://tu-sofia.bg/eng_new/fpmi/amee/
- 10–14 **AIM Workshop: Automorphic forms and harmonic analysis on covering groups**, American Institute of Mathematics, Palo Alto, California. (Nov. 2012, p. 1481)
- 10–14 **ApplMath13, 8th Conference on Applied Mathematics and Scientific Computing**, Sibenik, Croatia. (Sept. 2012, p. 1173)
- 10–14 **Computational Methods and Function Theory 2013**, Shantou University, Shantou, Guangdong, China. (Sept. 2012, p. 1173)
- 10–14 **Pde’s, Dispersion, Scattering theory and Control theory**, University of Monastir, Monastir, Tunisia. (Dec. 2012, p. 1593)
- 10–20 **Recent Advances in Hodge Theory: Period Domains, Algebraic Cycles, and Arithmetic**, UBC Campus, Vancouver, B.C., Canada. (Dec. 2012, p. 1593)
- 11–13 **4th International Conference on Mathematical and Computational Applications**, Celal Bayar University, Applied Mathematics and Computation Center, Manisa, Turkey. (Dec. 2012, p. 1593)
- 11–14 **6th Chaotic Modeling and Simulation International Conference (CHAOS2013)**, Yeditepe University, Istanbul, Turkey. (Feb. 2013, p. 262)
- 12–14 **Tenth edition of the Advanced Course in Operator Theory and Complex Analysis**, Sevilla, Spain. (Dec. 2012, p. 1594)
- * 16–21 **BIOMATH: International Conference of Mathematical Methods and Models in Biosciences and Young Scientists School**, Bulgarian Academy of Sciences, Sofia, Bulgaria.
Description: This annual event is devoted to recent research in life sciences based on applications of mathematics as well as mathematics applied to or motivated by biological studies. It is a multidisciplinary meeting forum for researchers who develop and apply mathematical and computational tools to the study of phenomena in the broad fields of biology, ecology, medicine, biotechnology, bioengineering, environmental science, etc.
Information: <http://www.biomath.bg/2013>
- 16–23 **51st International Symposium on Functional Equations**, Rzeszów, Poland. (Dec. 2012, p. 1594)
- 17–21 **AIM Workshop: Exponential random network models**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1173)
- * 17–21 **Fluid Mechanics and Singular Integrals**, Institute of Mathematics of the University of Seville (IMUS), Seville, Spain.
Description: This is an international conference organized by the Institute of Mathematics of the University of Seville (IMUS). The purpose of this conference is to gather experts in both Fluid Mechanics and Singular Integrals or more generally Harmonic Analysis. These areas of research are very active, there is a lot of interaction among them, and many questions and problems of interest can be found.
Information: <http://www.imus.us.es/FMSI13/>
- 17–21 **Summer school on Donaldson hypersurfaces (in Topological, Symplectic and Contact Spring in Toulouse)**, La Llagonne, France. (Jan. 2013, p. 115)
- 17–23 **Numerical Computations: Theory and Algorithms (International conference and Summer School NUMTA2013)**, Euroldo Hotel, Falerna (CZ), Tyrrhenian Sea, Italy. (Feb. 2013, p. 262)
- 17–28 **Algebraic Graph Theory**, University of Wyoming, Laramie, Wyoming. (Jan. 2013, p. 115)
- 17–28 **Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1481)
- 17–August 9 **SUMMERICERM: 2013 Undergraduate Summer Research Program Geometry and Dynamics**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 115)

18–20 **The 9th East Asia SIAM (EASIAM) Conference & The 2nd Conference on Industrial and Applied Mathematics (CIAM)**, Bandung Institute of Technology, Bandung, Indonesia. (Feb. 2013, p. 262)

19–21 **Nonlinear Elliptic and Parabolic Partial Differential Equations**, Dipartimento di Matematica, Politecnico di Milano, Italy. (Jan. 2013, p. 115)

19–22 **4th International conference “Nonlinear Dynamics-2013”**, Sevastopol, Ukraine. (Jan. 2013, p. 115)

* 20–21 **DIMACS Workshop on Big Data Integration**, DIMACS Center, CoRE Building, Rutgers University, Piscataway, New Jersey.

Short Description: The Big Data era is upon us: data is being generated, collected, and analyzed at an unprecedented scale, and data-driven decision making is sweeping through all aspects of technology and society. Since the value of data increases exponentially when it can be linked and fused with other data, addressing the big data integration challenge is critical to realizing the promise of Big Data—and conversely, Big Data techniques are critical to the goals of simplifying data integration.

The convergence of Big Data and data integration is emerging in many forms, largely motivated by the goals of integrating structured data on the Web or across communities. Increasingly we are seeing problems where (i) the number of data sources, even for a single domain, has grown to be in the tens of thousands, (ii) many of the data sources are very dynamic, as large volumes of newly collected data are continuously made available, (iii) the data sources are extremely heterogeneous in their structure, with considerable variety even for conceptually similar entities, and (iv) the data sources are of widely differing quality, with significant differences in the coverage, accuracy, and timeliness of data provided.

Organizers: Xin Luna Dong, AT&T Labs-Research, xlunadong@research.att.com; Zachary Ives, University of Pennsylvania, zives@cis.upenn.edu. Presented under the auspices of the DIMACS Special Focus on Information Sharing and Dynamic Data Analysis.

Workshop Coordinator: DIMACS Center, workshop@dimacs.rutgers.edu, 732-445-5928.

Information: <http://dimacs.rutgers.edu/Workshops/BigData/>.

21–24 **“Experimental and Theoretical Methods in Algebra, Geometry and Topology”**. Held in the honor of Alexandru Dimca and Stefan Papadima on the occasion of their 60th birthday, Mangalia (near Constanta), Romania. (Sept. 2012, p. 1173)

22–29 **Physics and Mathematics of Nonlinear Phenomena 2013**, Hotel Le Sirene, Gallipoli, South of Italy. (Oct. 2012, p. 1303)

24–26 **Numerical Analysis and Scientific Computation with Applications (NASCA13)**, University of Littoral Cote d’Opale, Calais, France. (Jan. 2013, p. 115)

24–28 **EACA’S Second International School on Computer Algebra and Applications**, Faculty of Sciences, University of Valladolid, Spain. (Feb. 2013, p. 262)

24–28 **Low-dimensional Topology and Geometry in Toulouse**, Université Paul Sabatier, Institut de Mathématiques de Toulouse, Toulouse, France. (Jan. 2013, p. 115)

24–29 **5th Conference for Promoting the Application of Mathematics in Technical and Natural Sciences (AMiTaNS’13)**, Resort of Albena, Bulgaria. (Feb. 2013, p. 262)

24–July 5 **Seminaire de Mathematiques Superieures 2013: Physics and Mathematics of Link Homology**, Montreal, Canada. (Dec. 2012, p. 1594)

26–29 **International Symposium on Symbolic and Algebraic Computation (ISSAC)**, Northeastern University, Boston, Massachusetts. (Nov. 2012, p. 1481)

27 **5th National Dyscalculia and Maths Learning Difficulties Conference, UK**, Cumberland Hotel, London, England. (Nov. 2012, p. 1481)

28–30 **First International Conference on Smarandache Multispace and Multistructure**, Academy of Mathematics and Systems, Chinese Academy of Sciences, Beijing 100190, People’s Republic of China. (Sept. 2012, p. 1173)

30–July 5 **British Combinatorial Conference 2013**, Royal Holloway, University of London, Egham, United Kingdom. (Feb. 2013, p. 262)

30–July 20 **IAS/PCMI Summer 2013: Geometric Analysis**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1481)

July 2013

1–4 **2nd IMA Conference on Dense Granular Flows**, Isaac Newton Institute of Mathematical Sciences, Cambridge, United Kingdom. (Oct. 2012, p. 1303)

1–5 **Erdős Centennial**, Budapest, Hungary. (Sept. 2012, p. 1173)

1–5 **International conference on Sampling Theory and Applications 2013**, Jacobs University, Bremen, Germany. (Sept. 2012, p. 1173)

1–5 **The 6th Pacific RIM Conference on Mathematics 2013**, Sapporo Convention Center, Sapporo City, Japan. (Nov. 2012, p. 1481)

1–5 **7th International Summer School on Geometry, Mechanics and Control (ICMAT School)**, La Cristalera, Miraflores de la Sierra, Madrid, Spain. (Feb. 2013, p. 262)

1–5 **Preconditioning of Iterative Methods—Theory and Applications 2013 (PIM 2013)**, Faculty of Civil Engineering, Czech Technical University in Prague, Czech Republic. (Oct. 2012, p. 1303)

* 1–12 **Advanced School and Workshop on Matrix Geometries and Applications**, The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy.

Description: Linear algebra is a fundamental topic in mathematics. It is used in almost all branches of mathematics and is among the most important mathematical disciplines for applications to science and technology.

Information: <http://agenda.ictp.it/smr.php?2470>.

1–12 **New Geometric Techniques in Number Theory**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1481)

2–5 **The 4th International Conference on Matrix Analysis and Applications**, Konya, Turkey. (Nov. 2012, p. 1481)

3–5 **The 2013 International Conference of Applied and Engineering Mathematics**, Imperial College London, London, United Kingdom. (Nov. 2012, p. 1482)

3–6 **International Conference on Anatolian Communications in Nonlinear Analysis (ANCNA 2013)**, Abant Izzet Baysal University, Bolu, Turkey. (Feb. 2013, p. 263)

8–10 **SIAM Conference on Control and Its Applications (CT13)**, Town and Country Resort and Convention Center, San Diego, California. (Sept. 2012, p. 1174)

8–12 **AIM Workshop: Generalizations of chip-firing and the critical group**, American Institute of Mathematics, Palo Alto, California. (Sept. 2012, p. 1174)

8–12 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Climate Change and the Ecology of Vector-borne Diseases**, Fields Institute, CDM, Toronto, Canada. (Sept. 2012, p. 1174)

8–12 **2013 SIAM Annual Meeting (AN13)**, Town and Country Resort & Convention Center, San Diego, California (Jan. 2013, p. 116)

- 8–12 **Topics in Numerical Analysis for Differential Equations**, Instituto de Ciencias Matemáticas-ICMAT, campus de Cantoblanco, Madrid, Spain. (Jan. 2013, p. 116)
- * 8–26 **RTG Summer School on Microlocal Analysis and Inverse Problems**, University of Washington, Seattle.
Description: The Research Training Group in the Department of Mathematics at the University of Washington will host a summer school on solving inverse problems via microlocal analysis, aimed at graduate students and advanced undergraduates who have the required background. Students will attend lectures in the morning and problem sessions in small groups with mentors in the afternoon. On-campus accommodation and meals will be provided, plus a travel allowance of up to \$600. The Summer School is supported by an NSF Research Training Grant. Support is restricted to U.S. citizens/permanent residents; international students can be considered but will have to pay all their own expenses. The course will be taught by Mark Anastasio, Guillaume Bal, Francois Monard, Plamen Stefanov, and Gunther Uhlmann. Visit our website for the full course description and prerequisites.
Information: <http://www.math.washington.edu/ipde/summer/index2013.html>.
- * 9–13 **Satellite Summer School to the 7th International Conference on Levy Processes: Theory and Applications**, Mathematical Research and Conference Center of the Institute of Mathematics of the Polish Academy of Sciences, Bedlewo, Poland.
Description: The summer school will be devoted to stochastic analysis and its applications. Its goal is to bring together young researchers interested in the theory and applications of stochastic processes.
Lecturers: Víctor Pérez Abreu (CIMAT), Nicolaus Privault (Nanyang Technological University), Jan Rosiński (University of Tennessee), Zoran Vondraček (University of Zagreb).
Topics: The following topics will be discussed: random matrices and free probability, Malliavin calculus for jump processes, analysis and representation of infinitely divisible distributions and processes, subordinators and potential theory.
Information: <http://bcc.impan.pl/13LevySchool/>.
- 14–19 **The Sixth International Congress of Chinese Mathematicians (ICCM)**, Opening ceremony on July 14 in the Big Hall of the Grand Hotel, Taipei, Taiwan. Lectures and invited talks from July 15–19 on the campus of National Taiwan University, Taipei, Taiwan. (Jan. 2013, p. 116)
- 15–19 **Finite Dimensional Integrable Systems 2013**, CIRM, Marseille, France. (Dec. 2012, p. 1594)
- 15–19 **ICERM IdeaLab 2013: Weeklong Program for Postdoctoral Researchers**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 116)
- * 15–19 **7th International Conference on Lévy Processes: Theory and Applications**, University of Wrocław and Wrocław University of Technology, Wrocław, Poland.
Description: The previous conferences in the series took place in Dresden (2010), Copenhagen (2007), Manchester (2005), Paris (2003) and Aarhus (2002, 1999). The aim of the conference is to bring together a wide range of researchers, practitioners and graduate students whose work is related to Lévy processes and infinitely divisible distributions. The scope of the conference: Fluctuation theory, Infinite divisibility with respect to nonclassical convolutions, Lévy trees, Numerical methods, Potential theory, Risk theory (including Finance and Insurance), Queues, Stable and self-decomposable processes, Stochastic analysis, Stochastic partial differential equations.
Information: <http://bcc.impan.pl/13Levy/>.
- * 15–19 **Women in Shape (WiSh): Modeling Boundaries of Objects in 2- and 3-Dimensions (in cooperation with AWM)**, Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, California.
Description: This workshop is designed to strengthen the shape modeling community by bringing together women researchers at various stages in their careers (from graduate student to senior researcher) to foster research collaboration and mentorship. We welcome applications from women with active research programs from smaller teaching schools as well as from research-oriented institutions. Participants will spend one week working together in small groups to solve one of four open questions in shape modeling. Instead of the more typical workshop structure where participants watch presentations of established results, WiSh participants will begin generating new results in collaboration with other participants. Small Group Topics: Simultaneous spectral and spatial analysis of shape; Dimensionality reduction and visualization of data in tree-spaces; Geometric shape segmentation; Folding polygons and surface approximation. The application is available online and is due January 30, 2013.
Information: <http://www.ipam.ucla.edu/programs/awm2013/>.
- 15–19 **Workshop on Interactions between Dynamical Systems and Partial Differential Equations (JISD2013)**, School of Mathematics and Statistics, Universitat Politècnica de Catalunya, Barcelona, Spain. (Feb. 2013, p. 263)
- 15–20 **Stochasticity in Biology: Is Nature Inherently Random?**, Montreal, Canada. (Dec. 2012, p. 1595)
- 20–25 **European Meeting of Statisticians**, Eotvos Lorand University, Budapest, Hungary. (Sept. 2012, p. 1174)
- 21–27 **Applied Topology - Bedlewo 2013**, Bedlewo, near Poznan, Poland. (Feb. 2013, p. 263)
- 22–25 **MIP2013: Mixed Integer Programming Workshop**, University of Wisconsin-Madison, Madison, Wisconsin. (Sept. 2012, p. 1174)
- 22–26 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Biodiversity in a Changing World**, CRM, Cambam, Montréal, Canada. (Sept. 2012, p. 1174)
- 22–26 **Positivity VII**, Leiden University, Leiden, The Netherlands. (Dec. 2012, p. 1595)
- 29–August 2 **36th Conference on Stochastic Processes and their Applications**, Boulder, Colorado. (Sept. 2012, p. 1174)
- 29–August 9 **Introduction to the Mathematics of Seismic Imaging**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1482)
- 31–August 10 **Workshop and Conference on the Topology and Invariants of Smooth 4-Manifolds (First Announcement)**, University of Minnesota, Twin Cities, Minnesota. (Jan. 2013, p. 117)
- August 2013**
- 3–11 **Groups St. Andrews 2013**, University of St. Andrews, St. Andrews, Fife, Scotland, UK. (Sept. 2012, p. 1174)
- 5–9 **1st Mathematical Congress of the Americas**, Guanajuato, Mexico. (Sept. 2012, p. 1174)
- * 5–9 **AIM Workshop: Sections of convex bodies**, American Institute of Mathematics, Palo Alto, California.
Description: This workshop, sponsored by AIM and the NSF, will be devoted to the study of geometric properties of convex bodies based on information about sections of these bodies.
Information: <http://aimath.org/ARCC/workshops/sectionsconvex.html>.
- * 5–9 **Quantum/Affine Schubert Calculus**, University of Oregon, Eugene, Oregon.
Description: The goal of this workshop will be to understand the ring isomorphism (after localization) between the quantum cohomology of the flag variety and the homology ring of the affine Grassmannian. This result was asserted in unpublished notes by Dale Peterson, and later formalized and proven by Thomas Lam and Mark Shimozono. Along the way, we will learn about Schubert calculus, equivariant

cohomology, quantum cohomology, the affine Grassmannian, and the Toda lattice, with an emphasis on concrete examples and computations. The workshop will be led by Allen Knutson.

Information: <http://pages.uoregon.edu/njp/qsc.html>.

5-9 **XXII Rolf Nevanlinna Colloquium**, Helsinki, Finland. (Aug. 2011, p. 1014)

* 11-12 **A quasiconformal life: Celebration of the legacy and work of F. W. Gehring**, University of Helsinki, Helsinki, Finland.

Description: In the memory of the distinguished mathematician Frederick William Gehring the conference "A quasiconformal life: Celebration of the legacy and work of F. W. Gehring" will be organized at the University of Helsinki, August 11-12, 2013. The Conference will take place at the downtown campus of the University of Helsinki on Sunday and Monday, August 11-12, after the XXIIth Rolf Nevanlinna Colloquium, which will be held at the same place August 5-9, 2013.

Lecturers: The following have already promised to give a lecture at the conference: Alan Beardon, Mario Bonk, Peter Jones, Pekka Koskela, Gaven Martin, Brad Osgood, Bruce Palka, Kai Rajala, Nageswari Shanmugalingam, Jussi Visl, and Jang-Mei Wu.

Registration: The registration and accommodation web pages will be available at the beginning of February 2013. There is no conference fee.

Information: <https://wiki.helsinki.fi/display/Gehring/Home> |

11-17 **3rd Mile High Conference on Nonassociative Mathematics**, University of Denver, Denver, Colorado. (Dec. 2012, p. 1595)

12-15 **International Conference on Algebra in Honour of Patrick Smith and John Clark's 70th Birthdays**, Balikesir, Turkey. (Nov. 2012, p. 1482)

* 12-15 **12th International Workshop on Dynamical Systems and Applications**, Atilim University, Ankara, Turkey.

Description: The workshop is in honour of the 70th birthday of Professor A. Okay Celebi.

Theme: The main theme will be "Partial Differential Equations and Applications". Talks will not be restricted to this subject only. These workshops constitute the annual meetings of the series of dynamical systems seminars traditionally organized at Middle East Technical University throughout each academic year. The workshop is held every year to make it an ideal platform for people to share views and experiences in Dynamical Systems and Applications.

Information: <http://iwdsa2013.atilim.edu.tr/>.

12-16 **AIM Workshop: Computable stability theory**, American Institute of Mathematics, Palo Alto, California. (Dec. 2012, p. 1595)

12-16 **Branching Diffusions and Random Trees**, Montreal, Canada. (Dec. 2012, p. 1595)

12-16 **2nd Strathmore International Mathematics Conference (SIMC-2013)**, Strathmore University, Nairobi, Kenya. (Feb. 2013, p. 263)

19-September 13 **Infectious Disease Dynamics**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom. (Dec. 2012, p. 1595)

19-December 20 **Mathematical General Relativity**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1174)

19-December 20 **Optimal Transport: Geometry and Dynamics**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1175)

22-23 **Connections for Women on Optimal Transport: Geometry and Dynamics**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1175)

* 24-31 **Second International Conference "Mathematics in Armenia: Advances and Perspectives" dedicated to the 70th anniversary of**

the foundation of Armenian National Academy of Sciences, YSU Guesthouse, Tsaghkadzor, Armenia.

Description: The main objective of the conference is to bring together Armenian mathematicians and friends of Armenian mathematics from all over the world to share and discuss high-quality research results, to exchange new ideas and to explore new frontiers for collaboration.

Focus: Will be real and complex analysis, differential and integral equations, probability and statistics, algebra and geometry. The program of the conference will consist of invited 40-minute plenary lectures and contributed 15-20-minute talks. Selected contributed papers will be published in the special issues of *Journal of Contemporary Mathematical Analysis of Armenian Academy of Sciences* (distributed by Springer).

Deadline: For registration and abstract submission is June 30, 2013.

Information: <http://mathconf.sci.am>.

25-27 **The 7th Global Conference on Power Control and Optimization (PCO'2013)**, Prague, Czech Republic. (Feb. 2013, p. 263)

26-29 **2nd International Eurasian Conference on Mathematical Sciences and Applications**, Sarajevo, Bosnia and Herzegovina. (Feb. 2013, p. 263)

26-30 **Geometric Function Theory and Applications 2013**, Isik University, Campus of Sile, Istanbul, Turkey. (Jan. 2013, p. 116)

26-30 **International Conference AMMCS-2013 (Applied Mathematics, Modeling and Computational Science)**, Waterloo, Ontario, Canada. (Sept. 2012, p. 1175)

26-30 **Introductory Workshop on Optimal Transport: Geometry and Dynamics**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1175)

* 26-September 7 **DGS 2013 — International Conference and Advanced School Planet Earth, Dynamics, Games and Science**, Calouste Gulbenkian Foundation (FCL) and Escola Superior de Economia e Gestão, Universidade Técnica de Lisboa (ISEG-UTL), Lisbon, Portugal. **Description:** The first two volumes of the CIM Series in Mathematical Sciences published by Springer-Verlag will consist of selected works presented in the conferences Mathematics of Planet Earth (CIM-MPE). The editors of these first two volumes are Jean-Pierre Bourguignon, Rolf Jeltsch, Alberto Pinto, and Marcelo Viana.

Keynote speakers and school lecturers: Michel Benaïm, Université de Neuchâtel, Switzerland; Jim Cushing, University of Arizona, USA; João Lopes Dias, Universidade Técnica de Lisboa, Portugal; Pedro Duarte, Universidade de Lisboa, Portugal; Diogo Gomes, Universidade Técnica de Lisboa, Portugal; Yunping Jiang, City University of New York, USA; Eric Maskin, Institute for Advanced Studies, USA (schedule permitting); Jorge Pacheco, Universidade do Minho, Portugal; David Rand, University of Warwick, UK; Martin Shubik, Yale University, USA (video lecture); Satoru Takahashi, Princeton University, USA; Marcelo Viana, Instituto de Matemática Pura e Aplicada IMPA, Brazil. **Information:** <http://sqig.math.ist.utl.pt/cim/mpe2013/DGS>.

* 27-31 **The 9th William Rowan Hamilton Geometry and Topology Workshop, on Geometry and Groups after Thurston**, Hamilton Mathematics Institute, Trinity College, Dublin, Ireland.

Description: First announcement: The workshop will consist of a two day mini-course August 27-28, followed by a three day lecture series, August 29-31, 2013.

Topic: This year's topic for the workshop is Geometry and Groups after Thurston. This past year has seen the passing of William P. Thurston (1946-2012) whose work and conjectural program influenced much of the research in the fields of low-dimensional geometry and topology and geometric group theory. Also recent progress has seen most of Thurston's conjectural program now solved. This year's workshop aims to consider new directions of research and

new problems which will direct future research in the spirit of Thurston's original program.

Information: <http://www.hamilton.tcd.ie/events/gt/gt2013.htm>.

27–December 20 **Mathematical Challenges in Quantum Information**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom. (Dec. 2012, p. 1596)

28–September 2 **Gelfand Centennial Conference: A View of 21st Century Mathematics**, Massachusetts Institute of Technology, Cambridge, Massachusetts. (Jan. 2013, p. 116)

September 2013

* 1–5 **Motivic Galois Groups**, Alfréd Rényi Institute of Mathematics, Budapest, Hungary.

Description: Mini-courses by: Yves André (Institut de Mathématiques de Jussieu, Paris), Joseph Ayoub (Universität Zürich), Marc Levine (Universität Duisburg–Essen).

Invited Lecturers: Michael Dettweiler (Universität Bayreuth), Hélène Esnault (Freie Universität Berlin), Jochen Heinloth (Universität Duisburg–Essen), Annette Huber-Klawitter (Albert-Ludwigs-Universität Freiburg), Peter Jossen (Université de Paris-Sud, Orsay), Bruno Kahn (Institut de Mathématiques de Jussieu, Paris).

Organizers: Stefan Müller-Stach (Universität Mainz), Tamás Szamuely (Rényi Institute, Budapest).

Information: <http://renyi.mta.hu/~szamuely/mgg.html>.

1–6 **Kangro-100, Methods of Analysis and Algebra, International Conference dedicated to the Centennial of Professor Gunnar Kangro**, University of Tartu, Tartu, Estonia. (Feb. 2013, p. 264)

1–August 31, 2014 **Call for Research Programmes 2013-2014**, Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain. (Sept. 2012, p. 1175)

1–December 20 **Research Program on Automorphisms of Free Groups: Algorithms, Geometry and Dynamics**, Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain. (Dec. 2012, p. 1596)

* 2–5 **XXII International Fall Workshop on Geometry and Physics**, University of Évora, Évora, Portugal.

Description: The Fall Workshops on Geometry and Physics have been held yearly since 1992, and bring together Spanish and Portuguese geometers and physicists, along with an ever increasing number of participants from outside the Iberian peninsula. The meetings aim to provide a forum for the exchange of ideas between researchers of different fields in Differential Geometry, Applied Mathematics and Physics, and always include a substantial number of enthusiastic young researchers amongst the participants.

Information: <http://www.ifwgp2013.uevora.pt/>.

3–4 **Connections for Women: Mathematical General Relativity**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1175)

3–6 **CAI 2013: 5th Conference on Algebraic Informatics**, ERISCS and IML, Aix-Marseille University, IGESA, Porquerolles Island, France. (Dec. 2012, p. 1596)

8–14 **Combinatorial Methods in Topology and Algebra**, Il Palazzone, Cortona, Italy. (Feb. 2013, p. 264)

* 9–13 **European Conference on Combinatorics, Graph Theory and Applications—Eurocomb 2013**, National Research Council of Italy (CNR), Pisa, Italy.

Description: In the tradition of EuroComb'01 (Barcelona), Eurocomb'03 (Prague), EuroComb'05 (Berlin), Eurocomb'07 (Seville), Eurocomb'09 (Bordeaux), and Eurocomb'11 (Budapest), this conference will cover the full range of combinatorics and graph theory including applications in other areas of mathematics, computer science and engineering.

Topics: Include, but are not limited to: Algebraic combinatorics, combinatorial geometry, combinatorial number theory, combinatorial optimization, designs and configurations, enumerative combinatorics, extremal combinatorics, graph theory, ordered sets, random methods, topological combinatorics.

Information: <http://www.eurocomb2013.it/>.

9–13 **Introductory Workshop: Mathematical General Relativity**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1175)

9–December 6 **ICERM Semester Program on “Low-Dimensional Topology, Geometry, and Dynamics”**, Institute for Computational and Experimental Research in Mathematics (ICERM), Providence, Rhode Island. (Sept. 2012, p. 1176)

11–13 **14th IMA Conference on Mathematics of Surfaces**, University of Birmingham, United Kingdom. (Sept. 2012, p. 1176)

15–20 **ICERM Workshop: Exotic Geometric Structures**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 116)

16–20 **Mathematics for an Evolving Biodiversity**, Montreal, Canada. (Dec. 2012, p. 1596)

16–20 **MatTriad'2013 - Conference on Matrix Analysis and its Applications**, Herceg-Novi, Montenegro. (Dec. 2012, p. 1596)

16–October 11 **Mathematics and Physics of the Holographic Principle**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom. (Dec. 2012, p. 1596)

23–27 **Mathematics of Sequence Evolution: Biological Models and Applications**, Montreal, Canada. (Dec. 2012, p. 1596)

28–29 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Mathematical Modeling of Indigenous Population Health**, BIRS, Banff, Canada. (Sept. 2012, p. 1176)

October 2013

5–6 **2013 Fall Southeastern Section Meeting**, University of Louisville, Louisville, Kentucky. (Sept. 2012, p. 1176)

7–11 **Coalescent Theory: New Developments and Applications**, Montreal, Canada. (Dec. 2012, p. 1596)

* 10–12 **International Conference on Statistical Distributions and Applications**, Mt. Pleasant, Michigan.

Description: This international conference is being organized to provide a platform for researchers and practitioners to share and discuss recent advancements on distribution theory and applications, and to provide opportunities for collaborative work. The scope includes, but is not limited to (1) new methodology for generating discrete and continuous (univariate and multivariate) distributions, (2) properties, estimation techniques, and goodness of fit tests on generalized distributions from both frequentist and Bayesian perspectives, (3) Bayesian priors using generalized distributions, (4) statistical modeling using generalized distributions, and (5) applications of generalized distributions in disciplines including biosciences, medical sciences, finance, insurance, and engineering.

Information: <http://people.cst.cmich.edu/lee1c/icosda/>.

12–13 **2013 Eastern Sectional Meeting**, Temple University, Philadelphia, Pennsylvania. (Sept. 2012, p. 1176)

14–18 **Fluid Mechanics, Hamiltonian Dynamics, and Numerical Aspects of Optimal Transportation**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1176)

15–19 **VII Moscow International Conference on Operations Research (ORM2013)**, Dorodnicyn Computing Center of RAS (CC of RAS) and Lomonosov Moscow State University (MSU), Moscow, Russian Federation. (Jan. 2013, p. 117)

18–20 **2013 Fall Central Section Meeting**, Washington University, St. Louis, Missouri. (Sept. 2012, p. 1176)

21–25 **ICERM Workshop: Topology, Geometry and Group Theory, Informed by Experiment**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 117)

21–25 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Sustainability of Aquatic Ecosystem Networks**, AARMS, Fredericton, New Brunswick, Canada. (Sept. 2012, p. 1176)

21–December 20 **Mathematics for the Fluid Earth**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom. (Dec. 2012, p. 1597)

* 23–25 **International Conference in Modeling Health Advances ICMHA 2013**, Berkeley, California.

Description: Modeling is important because it gives important insight into the method of treatment. The conference ICMHA'13 is held under the World Congress on Engineering and Computer Science, WCECS 2013.

Organizer: The WCECS 2013 is organized by the International Association of Engineers (IAENG), a non-profit international association for the engineers and the computer scientists.

Information: <http://www.jaeng.org/WCECS2013>.

28–November 9 **Lévy Processes and Self-similarity 2013**, Tunis, Tunisia. (Feb. 2013, p. 264)

November 2013

2–3 **2013 Western Fall Section Meeting**, University of California Riverside, Riverside, California. (Sept. 2012, p. 1176)

4–8 **Biodiversity and Environment: Viability and Dynamic Games Perspectives**, Montreal, Canada. (Dec. 2012, p. 1597)

09–16 (NEW DATE) **International Conference on Fractals and Wavelets**, Rajagiri School of Engineering & Technology Kakkanad Cochin, Kerala, India. (Feb. 2013, p. 264)

10–15 **Mathematics of Planet Earth 2013 - Pan-Canadian Thematic Program - Current Challenges for Mathematical Modelling of Cyclic Populations**, BIRS, Banff, Canada. (Sept. 2012, p. 1176)

12–14 **The Second International Conference on Informatics Engineering & Information Science (ICIEIS2013)**, University Technology Malaysia (UTM), Kuala Lumpur, Malaysia. (Dec. 2012, p. 1597)

18–22 **Evolution Problems in General Relativity**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1176)

18–22 **ICERM Workshop: Geometric Structures in Low-Dimensional Dynamics**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 117)

19–21 **Gulf International Conference on Applied Mathematics (GICAM13)**, Mubarak Al-Abdullah Al-Jaber Area, Kuwait. (Feb. 2013, p. 264)

26–28 **International Conference on Pure and Applied Mathematics, ICPAM-LAE 2013**, Png University of Technology, Lae, Morobe Province, Papua New Guinea. (Sept. 2012, p. 1176)

December 2013

* 7–11 **“ATCM+TIME 2013”: A joint session of 18th Asian Technology Conference in Mathematics and 6th Technology & Innovations in Mathematics Education**, Department of Mathematics, Indian Institute of Technology, Powai, Mumbai 400076, India.

Description: The ATCM conferences are international conferences addressing technology-based issues in all mathematical sciences. The 17th ATCM December 16–20, 2012, was held at SSR University, Bangkok, Thailand. About 400 participants coming from over 30 countries around the world participated in the conference. The TIME conferences are national (Indian) conferences held every two years. TIME conferences serve a dual role: as a forum in which

mathematics educators and teachers will come together to discuss and to probe major issues associated with the integration of technology in mathematics teaching and learning, and as a place where they can share their perspectives, personal experiences, and innovative teaching practices.

Information: <http://atcm.mathandtech.org> and <http://www.math.iitb.ac.in/TIME2013>.

* 16–20 **Fundamental Groups in Arithmetic and Algebraic Geometry**, Centro di Ricerca Matematica Ennio De Giorgi, Pisa, Italy.

Description: The study of fundamental groups of algebraic varieties has been an important theme in algebraic geometry for a long time. With the introduction of purely algebraic-geometric variants, due to Grothendieck, Deligne, Nori, and others, it has become crucial in arithmetic geometry, revealing deep connections with Galois theory and algebraic number theory.

Purpose: Of this conference is to present a wide range of recent relevant advances, in complex geometry, algebraic geometry in positive characteristic and in arithmetic geometry. We aim at gathering experts in different aspects of this vast subject, thus painting a multifaceted yet unified picture of it.

Information: <http://www.crm.sns.it/event/281/>.

28–30 **3rd International Conference on Mathematics & Information Science (ICMIS 2013)**, Luxor, Egypt. (Oct. 2012, p. 1303)

January 2014

5–7 **ACM-SIAM Symposium on Discrete Algorithms (SODA14), being held with Analytic Algorithmics and Combinatorics (ANALCO14) and Algorithm Engineering and Experiments (ALENEX14)**, Hilton Portland & Executive Tower, Portland, Oregon. (Dec. 2012, p. 1597)

6–July 4 **Free Boundary Problems and Related Topics**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

20–May 23 **Algebraic Topology Program**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1482)

20–May 23 **Model Theory and Number Theory**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1177)

23–24 **Connections for Women: Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1177)

27–31 **Introductory Workshop: Algebraic Topology**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1177)

February 2014

3–7 **Introductory Workshop: Model Theory, Arithmetic Geometry and Number Theory**, Mathematical Sciences Research Institute, Berkeley, California. (Nov. 2012, p. 1482)

3–May 9 **ICERM Semester Program on “Network Science and Graph Algorithms”**, ICERM, Providence, Rhode Island. (Jan. 2013, p. 117)

10–11 **Connections for Women: Model Theory and its interactions with number theory and arithmetic geometry**, Mathematical Sciences Research Institute, Berkeley, California. (Sept. 2012, p. 1177)

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.

March 2014

* 24–April 17 **Mathematical, Statistical and Computational Aspects of the New Science of Metagenomics**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: Metagenomics is the study of the total genomic content of microbial communities. DNA material is sampled collectively from the microorganisms that populate the environment of

interest. The extracted DNA sequences are then used to profile the environment and its biodiversity, its dominant microbial classes or biological functions, and whether and how this profile differs from those of other environments. This research programme will bring together leading expertise in the multiple disciplines involved, including mathematics, computer science, probability and statistics, biomedical research and biology. The brief of the programme will be to explore the major current analytical and computational open problems in metagenomics, and to identify opportunities for application and development of theory and methods, with an emphasis on synergy between disciplines. Several workshops will take place during the programme. For full details please see: <http://www.newton.ac.uk/events.html>.

Information: <http://www.newton.ac.uk/programmes/MTG/index.html>.

April 2014

* 22–May 16 **Advanced Monte Carlo Methods for Complex Inference Problems**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: In recent years there has been an explosion of complex data-sets in areas as diverse as Bioinformatics, Ecology, Epidemiology, Finance and Population genetics. In a wide variety of these applications, the stochastic models devised to realistically represent the data-generating processes are very high-dimensional and the only computationally feasible and accurate way to perform statistical inference is with Monte Carlo. The focus of this programme is on recent innovations in the field of Monte Carlo methods for inference in complex and intractable statistical problems. It will take up the following research threads: Approximate Bayesian Computation; SMC and Markov Chain Monte Carlo and their integration; and recent theoretical advancements underpinning these areas. Several workshops will take place during the programme. For full details please see <http://www.newton.ac.uk/events.html>.

Information: <http://www.newton.ac.uk/programmes/MCM/index.html>.

June 2014

* 9–July 4 **Interactions between Dynamics of Group Actions and Number Theory**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: In the last decade there have been several important breakthroughs in number theory and diophantine geometry, where progress on long-standing open problems has been achieved by utilising ideas originated in the theory of dynamical systems on homogeneous spaces. Dynamical systems techniques are applicable to a wide range of number-theoretic objects that have many symmetries.

Aim: Of this programme is to bring together researchers working in number theory and homogeneous dynamics to discuss the recent developments and open problems that lie at the crossroads of these fields and to encourage more interaction among people working in these diverse areas. Several workshops will take place during the programme. For full details please see: <http://www.newton.ac.uk/events.html>.

Information: <http://www.newton.ac.uk/programmes/GAN/index.html>.

January 2015

* 5–June 26 **Periodic and Ergodic Spectral Problems**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: The main objective of the programme is to bring together specialists in three major themes: periodic, almost-periodic, and random operators, to discuss recent developments and deep connections between the methods intrinsic for each of these research areas. Operators on manifolds or graphs and more general ergodic operators will also be considered, as well as problems that lie at the interface of the main topics (e.g., “sheared” periodic operators),

and applications in other areas of mathematics (e.g., geometry). At the beginning of the programme, there will be a two-week long instructional conference with six mini-courses of about ten lectures each, which will be designed for students and non-specialists. Further there will be three workshops evenly spread over the period of the programme to cover more advanced results, each centred on one of the main themes. Several workshops will take place during the programme. For full details please see <http://www.newton.ac.uk/events.html>.

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

* 12–July 3 **Random Geometry**, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom.

Description: A new frontier has emerged at the interface between probability, geometry, and analysis, with a central target to produce a coherent theory of the geometry of random structures. The principal question is the following: within a given structure, what is the interplay between randomness and geometry? More precisely, does the geometry appear to be random at every scale (i.e., fractal), or do fluctuations “average out” at sufficiently large scales? Can the global geometry be described by taking a suitable scaling limit that allows for concrete computations? The goal of the programme is to gather experts from probability, geometry, analysis, and other connected areas, in order to study aspects of this question in some paradigmatic situations. Several workshops will take place during the programme. For full details please see <http://www.newton.ac.uk/events.html>.

Information: <http://www.newton.ac.uk/programmes/RGM/index.html>.