
Mathematics Calendar

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

January 2003

* 6-7 **DIMACS Workshop on Software Security**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Short Description: The security of computer systems and networks has become increasingly limited by the quality and security of the software running on these machines. Researchers have estimated that more than half of all vulnerabilities are due to buffer overruns, an embarrassingly elementary class of bugs. All too often systems are hacked by exploiting software bugs. In short, a central and critical aspect of the security problem is a software problem. How can we deal with this?

The Software Security Workshop will explore these issues. The scope of the workshop will include security engineering, architecture and implementation risks, security analysis, mobile and malicious code, education and training, and open research issues. In recent years many promising techniques have arisen from connections between computer security, programming languages, and software engineering, and one goal is to bring these communities closer together and crystalize the subfield of software security.

Sponsor: DIMACS Center.

Organizers: G. McGraw (Chair), Cigital, gem@cigital.com, E. Felten, Princeton Univ., felten@cs.princeton.edu, V. Gligor, Univ. of Maryland, gligor@umd.edu, D. Wagner, Univ. of California at Berkeley, daw@cs.berkeley.edu.

Invited Speakers: M. Howard, Microsoft, The Microsoft Trustworthy Computing Initiative from the Inside; B. Kernighan, Coding Excellence: Security as a Side Effect of Good Software; D. Geer, @stake, Software Security in the Big Picture: Repeating ourselves all over again.

Local Arrangements: J. Thiemann, DIMACS Center, [\[dimacs.rutgers.edu\]\(mailto:dimacs.rutgers.edu\), 732-445-5928.](mailto:jennifer@</p></div><div data-bbox=)

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

* 8-10 **Workshop on Dynamical Stochastic Modeling in Biology**, University of Copenhagen, Denmark.

Description: The main purpose of the workshop is to discuss dynamical stochastic models for biological problems and to identify new areas where such models might be useful. The emphasis of the workshop will be on ecology, gene regulatory networks, and topics in bioinformatics.

Organizers: M. Huebner (Michigan State Univ.) and M. Sørensen (Univ. of Copenhagen).

Confirmed Speakers: B. M. Bibby (The Royal Veterinary and Agricultural Univ., Copenhagen), D. Bray (Univ. of Cambridge), M. Huebner (Michigan State Univ.), V. Isham (Univ. College London), H. de Jong (INRIA, France), C. Laredo (INRA, Paris 6-7), G. Reinert (Univ. of Oxford), M. S. Samoilov (Univ. of California, Berkeley), E. van Someren (Tech. Univ. of Delft), F. Sun (Univ. of Southern California).

Information: <http://www.math.ku.dk/~michael/dynbio/>.

* 28-31 **Nonlinear Evolution Problems**, Rome, Italy.

Program Committee: M. Bertsch, L. Boccardo, E. Magenes (Chairman), A. Tesei.

Organizing Committee: L. Giacomelli, C. Mascia, L. Moschini, M. A. Pozio, A. Tesei.

Invited Speakers: (*) to be confirmed. L. Ambrosio, I. Athanasopoulos, H. Berestycki (*), A. Bressan, L. Caffarelli (*), M. G. Crandall (*), C. Dafermos, G. Da Prato, J. I. Diaz, M. Escobedo, A. Friedman, G. Gilardi, L. Hsiao, S. Kamin, S. Luckhaus, H. Matano (*), W.-M. Ni, F.

This section contains announcements of meetings and conferences of interest to some segment of the mathematical public, including ad hoc, local, or regional meetings, and meetings and symposia devoted to specialized topics, as well as announcements of regularly scheduled meetings of national or international mathematical organizations. A complete list of meetings of the Society can be found on the last page of each issue.

An announcement will be published in the *Notices* if it contains a call for papers and specifies the place, date, subject (when applicable), and the speakers; a second announcement will be published only if there are changes or necessary additional information. Once an announcement has appeared, the event will be briefly noted in every third issue until it has been held and a reference will be given in parentheses to the month, year, and page of the issue in which the complete information appeared. Asterisks (*) mark those announcements containing new or revised information.

In general, announcements of meetings and conferences held in North America carry only the date, title of meeting, place of meeting, names of speakers (or sometimes a general statement on the program), deadlines for abstracts or contributed papers, and source of further information. Meetings held outside the North American area may carry more detailed information. In any case, if there is any application deadline with

respect to participation in the meeting, this fact should be noted. All communications on meetings and conferences in the mathematical sciences should be sent to the Editor of the *Notices* in care of the American Mathematical Society in Providence or electronically to notices@ams.org or mathcal@ams.org.

In order to allow participants to arrange their travel plans, organizers of meetings are urged to submit information for these listings early enough to allow them to appear in more than one issue of the *Notices* prior to the meeting in question. To achieve this, listings should be received in Providence **six 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, 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/>.

Otto (*), S. I. Pohozaev, G. Savare', H. M. Soner, S. Spagnolo, J. L. Vazquez, L. Veron, A. Visintin.

Information: Further information and registration forms are available at: <http://www.mat.uniroma1.it/~lincei03/>.

February 2003

- * 27–28 **DIMACS Workshop on Protein Domains: Identification, Classification and Evolution**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Short Description: The workshop is devoted to computational challenges in this new phase of understanding protein domain organization. The goal of the workshop is to bring together biological and computational/mathematical scientists to discuss the state of the art and the open questions focusing on the following aspects of protein domains: methods for identification of protein domains, protein domain comparison and classification, mechanisms of domain evolution, topological and geometrical properties of protein domains, and the relation between sequence and structure conservation.

Sponsor: DIMACS Center.

Organizers: S. Bryant, Nat. Inst. of Health, bryant@ncbi.nlm.nih.gov; T. Przytycka, Johns Hopkins Univ., przytyck@grserv.med.jhmi.edu.

Contact: T. Przytycka, Johns Hopkins Univ., przytyck@grserv.med.jhmi.edu.

Local Arrangements: J. Herold, DIMACS Center, jessicah@dimacs.rutgers.edu; tel: 732-445-5928.

Information: See <http://dimacs.rutgers.edu/Workshops/ProteinDomains/>.

March 2003

- * 6–8 **Sixth New Mexico Analysis Seminar**, University of New Mexico, Albuquerque, New Mexico.

Description: This seminar is organized each spring by analysis aficionados at New Mexico State University and The University of New Mexico. The goal is to provide an opportunity for scientific exchange and cooperation among broadly defined analysts. The centerpiece of the seminar is a series of one-hour lectures given by a keynote speaker. There is time allocated for shorter contributed talks. If you would like to attend and /or give a talk, please contact one of the organizers by January 17, 2003. Doctoral students and recent Ph.D.'s are especially encouraged to apply. An online registration form can be found at: <http://www.math.unm.edu/colloquia/forms/analysis.php/>.

Sponsor: NSF.

Organizers: J. Alvarez (jalvarez@math.nmsu.edu), J. Lakey (jlakey@math.nmsu.edu), C. Pereyra (crisp@math.unm.edu).

Main Speaker: J. Pipher, Brown University, Lectures on "Boundary value problems for elliptic operators: A harmonic analysis approach to issues related to lack of smoothness".

Information: We will provide travel stipends for qualified graduate students. We intend to pay, at least partially, shared accommodations for all participants, and if there are funds left, we will reimburse some travel expenses to those participants who have no other sources of funding (priority given to speakers). Information about the conference will be posted at: http://www.math.unm.edu/colloquia/analysis_seminar.php/.

- * 12–14 **DIMACS Working Group Meeting on Mathematical and Computational Aspects Related to the Study of the Tree of Life**, DIMACS Center, Rutgers University, Piscataway, New Jersey.

Short Description: Vast quantities of molecular data are becoming available, and there is a need to provide efficient computer algorithms that will appropriately scale to accommodate the size and quality of the underlying data sets. We recognize that for many reasons viral evolution may have features not necessarily present in the evolution of organisms on a multicellular scale. Since a workshop on the role of evolution in epidemiology is in the planning stage,

our intention is to not focus on such organisms. There are a number of possible topics. We just indicate some possible themes here. We intend to ask the bioconsensus community for suggestions. First of all should this Tree of Life really be a tree, or is some other data structure a more plausible model? Certainly certain local portions of evolutionary structure should be treelike, but when these local structures are assembled, should they form a supertree or some more general structure? Here we wish to compare mathematical theory with current research trends in the biological community. We hope that the biologists will suggest areas they find useful, as opposed to mathematicians just suggesting models of interest to them.

Sponsor: DIMACS Center.

Organizers: M. F. Janowitz, DIMACS, melj@dimacs.rutgers.edu; F. R. McMorris, Illinois Inst. of Tech., mcmorris@iit.edu; F.-J. Lapointe, Univ. de Montreal, lapoinf@biol.umontreal.ca.

Contact: M. F. Janowitz, DIMACS, melj@dimacs.rutgers.edu.

Local Arrangements: J. Herold, DIMACS Center, jessicah@dimacs.rutgers.edu; tel: 732-445-5928.

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

- * 15–19 **Arizona Winter School on "Logic and Number Theory"**, University of Arizona, Tucson, Arizona.

Topics: Motivic and p-adic integration, model theory and diophantine geometry, Hilbert's tenth problem, elementary equivalence of finitely generated fields, and the history of interactions between logic and number theory.

Speakers: F. Loeser, A. Macintyre, A. Pillay, B. Poonen, F. Pop, T. Scanlon.

Organizers: M. Kim, A. Pillay, B. Poonen.

Deadline: Applications for funding or for participation in a student project should be received by mail by December 31, 2002.

Information: <http://swc.math.arizona.edu/~swcenter/news/index.html>.

- * 23–29 **INGO2003: Invariant Theory and Its Interactions with Related Fields**, University of Göttingen, Germany.

Theme: INGO2003 is an initiative of research groups in Aberdeen, Manchester, and Göttingen working in the areas of algebraic topology, representation theory, and commutative algebra who have found that communication across narrow specialty boundaries can bring huge scientific benefits. The conference is organized around the central theme of invariant theory and will emphasize its interactions with other areas of mathematics. It is particularly addressed to young mathematicians from diverse research areas who wish to exchange ideas and learn new techniques that may point the way for their future work.

Invited Speakers: L. Avramov (Univ. of Nebraska), J. Hartmann (Univ. of Heidelberg), R. Kane (Univ. of Western Ontario), M. D. Neusel (Texas Tech Univ.), N. Nossem (Univ. of Sheffield), A. Shepler (Texas State Univ.), W. M. Singer (Fordham Univ.), P. Symonds (Manchester Inst. of Tech.), W. Traves (U.S. Naval Academy), G. Walker (Manchester Univ.), R. Wood (Manchester Univ.).

Scientific Committee: S. Betley (Univ. of Warsaw), J. Hubbuck (Univ. of Aberdeen), N. H. V. Hu'ng (Vietnam National Univ.), K. Lesh (Union College), D. M. Meyer (Univ. of Göttingen), L. Smith (Univ. of Göttingen), T. A. Springer (Univ. of Utrecht).

Local Organizers: D. M. Meyer (Univ. of Göttingen), L. Smith (Univ. of Göttingen).

Information: email: organizers@ingo2003.de, or visit <http://www.ingo2003.de/>.

- * 24–28 **Mathematical Theory of Hyperbolic Systems of Conservation Laws**, Newton Institute of Mathematical Sciences, Cambridge, UK.

Description: Nonlinear hyperbolic systems of conservation laws govern a broad spectrum of physical phenomena in compressible fluid dynamics, nonlinear material science, etc. Such equations admit solutions that may exhibit shock waves and other nonlinear

waves (propagating phase boundaries, fluid interfaces, etc.) which play a dominant role in multiple areas of physics. Recent developments on the theory of one-dimensional systems will be covered, including: entropy conditions, L1 well-posedness, singular limits, diffusive approximations, relaxation models, kinetic relations, shock wave structure, links with thermodynamics, etc.

Sponsor: Newton Institute of Mathematical Sciences, Cambridge.
Information: <http://www.cmap.polytechnique.fr/~lefloch/newton-conf.html>.

- * 31–April 4 **Multiphase Fluid Flows and Multi-Dimensional Hyperbolic Problems**, Newton Institute of Mathematical Sciences, Cambridge, UK.

Description: This second week will focus on multidimensional aspects of hyperbolic conservation laws and on computational methods with applications to multiphase flows. A partial list of topics includes: existence theory for multidimensional hyperbolic equations, transonic flow models, mathematical modeling of liquid-vapor flows, numerical schemes for multiphase flows, non-conservative hyperbolic systems, real fluids, material interfaces, etc.

Sponsor: Newton Institute of Mathematical Sciences, Cambridge.
Information: <http://www.cmap.polytechnique.fr/~lefloch/newton-conf.html>.

April 2003

- * 5–6 **CombinaTexas: Combinatorics Conference in the South-Central U.S.**, Southwest Texas State University, San Marcos, Texas.

Description: This will be the fourth annual meeting of CombinaTexas, a conference series intended to increase communication between mathematicians in the region, promote the research of the regional combinatorics community, and bring in leading combinatorialists from elsewhere. This year the conference has a special focus on Graph Theory and Its Applications. The conference topics range over a variety of areas around the special focus, including computational graph theory; topological graph theory; random graphs; and applications to algorithms, geometry, and number theory.

The conference will be set around 7 one-hour talks delivered by internationally recognized researchers. There will be sessions of contributed papers and poster exhibitions, for which we welcome submission.

Sponsors: Southwest Texas State Univ., Texas A&M Univ.
Organizers: D. Ferrero (dferrero@swt.edu), X. Jia (jia@swt.edu), C. Yan (cyan@math.tamu.edu).

Invited Speakers: J. Bagga (Ball State Univ.); N. Dean (Rice Univ.); F. Harary (New Mexico State Univ.); E. Kubicka (Univ. of Kentucky); M. Nathanson (City Univ. of New York); V. Vu (Univ. of California at San Diego); H. Wilf (Univ. of Pennsylvania).

Call for Papers: Contributed talks of 15 minutes in length are invited, as well as posters. To contribute a talk or a poster, submit the title and abstract by March 15, 2003, to C. Yan (cyan@math.tamu.edu) or D. Ferrero (dferrero@swt.edu).

Information: <http://www.math.tamu.edu/~cyan/combinatexas/2003/index.html>.

May 2003

- * 18–21 **Second International Workshop on Computer Graphics and Geometric Modeling, CGGM'2003**, Delta Centre Hotel, Montreal, Canada.

Description: In the last few years, computer graphics and geometric modeling have become some of the most important and challenging areas of computer science. This workshop solicits for presentation high-quality papers describing original research results in computer graphics and geometric modeling (see topics below).

All accepted papers will be published as full papers in the Springer-Verlag Lecture Notes in Computer Science (LNCS) series. In addition, all accepted papers will be scheduled for oral presentation.

Submission implies the willingness of at least one of the authors to register and present the paper.

Topics: Geometric modeling; solid modeling; physically based modeling; surface reconstruction; volume visualization; autonomous agents; computer animation; computer graphics in art, education, engineering, entertainment and medicine; rendering techniques; multimedia; non-photo-realistic rendering; virtual reality; virtual environments; illumination models; texture models; computer graphics and the Internet (VRML, Java, etc.); artificial intelligence for computer graphics; computer graphics software; computer graphics applications; computer graphics education; industrial applications of computer graphics.

Language: English.

Deadlines: January 7, 2003: Draft papers due; February 5, 2003: Notification of acceptance; February 20, 2003: Camera-ready papers; February 28, 2003: Preregistration.

Information: The workshop allows prospective authors to send a full paper by email: iglesias@unican.es. All submissions must be written in English. Send the paper as an attachment provided that the size of the message is reasonable (less than 4 MB). Otherwise, please contact us before sending the paper. Acceptable formats are PDF and PostScript (use extension .pdf or .ps respectively). You can also send your paper by airmail to: A. Iglesias, Dept. of Applied Mathematics and Computational Sciences, University of Cantabria, E.T.S.I. de Caminos, Canales y Puertos, Avda. de los Castros, s/n, Santander, E-39005, Spain, and also send any problems to the above address. However, we strongly recommend you use email for paper submission. The style files for the LNCS can be found at the following URL: <http://www.springer.de/comp/lncs/authors.html>.

- * 19–22 **Workshop on Dynamics and Bifurcations of Patterns in Dissipative Systems**, Colorado State University, Fort Collins, Colorado.

Sponsors: National Science Foundation, Colorado State Univ.

Program: Recent experimental results have demonstrated a variety of new patterns that can be observed in macroscopic systems far from equilibrium. Understanding these patterns is a major challenge for theoretical research. The workshop will stimulate the interaction between different experts, young researchers, and advanced graduate students in identifying key ideas, new advances, and open questions in the mathematical analysis of spatiotemporal patterns in dissipative systems, including both continuous systems and coupled cells.

Description: The goal of the workshop is to discuss relations between different approaches such as center manifolds and normal forms, singular perturbation methods, modulation and phase diffusion equations; and to stimulate the interaction between experts in equivariant bifurcation theory, pattern formation and dynamical systems. Specific topics include bifurcation of periodic and quasiperiodic patterns, spiral and target waves, heteroclinic cycles, phase dynamics and phase turbulence, fronts and modulated fronts, localized structures (pulses and solitary waves), bursting, intermittent and chaotic dynamics, symmetry breaking through discretization and its numerical implications. Applications will be presented in fluid mechanics, astrophysics, nonlinear oscillators and other systems.

Main Topics: Stability, bifurcation and dynamics of patterns; reduction of the governing equations; the role of symmetry.

Invited Speakers (tentative list): D. Armbruster, Arizona State Univ., Localized structures in parametrically forced systems; E. Boddenschatz, Cornell Univ., Experiments in thermal convection and spatiotemporal chaos; C. B. Ermentrout, Univ. of Pittsburgh, Patterns in neuronal networks; M. Golubitsky, Univ. of Houston, Symmetries, pattern formation, and geometric visual hallucinations; G. Gunaratne, Univ. of Houston, Characterizations of complex patterns and their applications; J. Lega, Univ. of Arizona, Phase diffusion and weak turbulence; E. Knobloch, Univ. of California, Berkeley, Bursts and intermittency in fluid mechanics; I. Melbourne, Univ. of Surrey, Mathematical foundations of Ginzburg Landau theory; M. Proc-

tor, DAMTP Cambridge, UK, Hydrodynamic instabilities; H. Riecke, Northwestern Univ., to be announced; M. Silber, Northwestern Univ., Bifurcation with symmetry and superlattices.

Organizers: G. Dangelmayr and I. Oprea, Colorado State Univ.

Information: <http://www.math.colostate.edu/~juliana/DynBifPat.html>.

* 28–31 **ACMS 14th Biennial Conference**, Point Loma Nazarene University, San Diego, California.

Description: The Association of Christians in the Mathematical Sciences will sponsor their 14th conference since 1977. Paul Zorn from St. Olaf College is the featured speaker.

Conference Chair: G. Crow, Dept. of Math., Point Loma Nazarene University, San Diego, CA 92106; email: gcrow@ptloma.edu.

Information: For information or to submit abstracts of proposed papers, contact the conference chair.

* 28–31 **Quantum and Reversible Computation**, State University of New York at Stony Brook.

Goal: The goal of this conference is to generate interaction between mathematicians interested in efficient quantum algorithms and quantum error-correcting codes, and physicists trying to build quantum computers. We will stimulate this interaction with lectures on the most important recent developments by world experts.

Organizers: C. N. Yang Institute for Theoretical Physics, and Inst. for Math. Sci.

Organizing Committee: D. Averin, T. Bergeman, J. Glimm, P. D. Grannis, D. Gromoll, A. Kirillov, V. Korepin (chairman), H. B. Lawson, K. Likharev, J. Lukens, H. Metcalf, J. Milnor, S. Popescu, V. Semenov, G. Sterman, S. Sutherland, and W. Weisberger.

Confirmed Speakers: D. Averin, SUNY at Stony Brook; I. Cirac, Max-Planck-Institute, Munich; M. Devoret, Yale; D. DiVincenzo, IBM; E. H. Farhi, MIT; R. Fazio, Scuola Normale Superiore, Pisa, Italy; S. Han, Univ. of Kansas; M. Hillery, Hunter College, CUNY; H. Kwong Lo, MagiQ Technologies; L. Levitin, Boston Univ.; J. Lukens, SUNY at Stony Brook; C. Monroe, Univ. of Michigan, Ann Arbor; L. A. Orozco, SUNY at Stony Brook; V. Semenov, SUNY at Stony Brook; P. Shor, AT&T; H. Yuen, North West Univ.; P. Zoller, Institute for Theoretical Physics, Univ. of Innsbruck.

Information: <http://insti.physics.sunysb.edu/itp/conf/simons-qcomputation.html>.

June 2003

* 2–4 **International Workshop on Computer Algebra Systems and Their Applications, CASA'2003**, Saint Petersburg, Russian Federation.

Description: Computer algebra (also known as symbolic computation or computational algebra) has found applications in many domains of science such as mathematics, physics, chemistry, engineering, computer science, computational biology, education, etc. The computer algebra systems (cas) such as Mathematica, Maple, MuPAD, Reduce, Axiom (and others that have been developed) are becoming more and more popular and now they are valuable tools for teaching, research, and industry. This workshop solicits for presentation high-quality papers describing original research results in computer algebra systems and their applications.

All accepted papers will be published as full papers in the Springer-Verlag Lecture Notes in Computer Science (LNCS) series. In addition, all accepted papers will be scheduled for oral presentation. Submission implies the willingness of at least one of the authors to register and present the paper.

Topics: This workshop is intended to cover recent developments (algorithms, programs, packages, extensions, new tools, etc.) developed for computer algebra systems. Emphasis will be put on the applications of these systems for solving problems in science and engineering. Thus, we accept papers describing research on actual or possible applications of computer algebra systems and techniques to other fields (such as mathematics, physics, chemistry, engineering, computer science, education, industry, etc.). Papers

exploring the interaction of the symbolic, numerical, and graphical tools of the computer algebra systems to solve complex problems are also welcomed.

Language: English.

Topics: The topics to be addressed include, but are not limited to: computer algebra applications to mathematics, physics, chemistry, engineering, biology, computer science, social sciences, etc.; symbolic-numerical computations using computer algebra systems; computer algebra systems and the Internet; industrial applications of computer algebra; problem-solving environments; symbolic-numeric interface; computer algebra systems in education; computer algebra-based simulations; new computer algebra developments (packages, notebooks, etc.).

Deadlines: January 10, 2003: Draft papers due; February 5, 2003: Notification of acceptance; February 20, 2003: Camera-ready papers; February 28, 2003: Preregistration.

Information: email: iglesias@unican.es; <http://personales.unican.es/iglesias/TSCG2003/>.

* 2–4 **Technical Session on Computer Graphics, TSCG'2003**, Saint Petersburg, Russian Federation.

Description: Nowadays, computer graphics is recognized as one of the important and challenging areas of computer science. This technical session solicits for presentation high-quality papers describing original research results in computer graphics.

All accepted papers will be published as full papers in the Springer-Verlag Lecture Notes in Computer Science (LNCS) series. In addition, all accepted papers will be scheduled for oral presentation. Submission implies the willingness of at least one of the authors to register and present the paper.

Language: English.

Topics: This technical session will accept original papers describing research on computer graphics. Therefore there is no restriction about the paper contents, provided that the subject is computer graphics or any related area. The paper should clearly identify the computer graphics field of the paper in order to speed up the reviewing process. In addition, the paper should emphasize the problem to be solved, the procedure to do it, and the potential or actual applications of the paper.

Survey papers can be accepted on the basis that they provide an interesting new approach to some specific field or they include an organized, well-structured review with a well-documented bibliography so that the paper can be useful for beginners.

Finally, papers describing hardware and/or software systems for any computer graphics topics are also welcomed.

Deadlines: December 20, 2003: Draft papers due; February 1, 2003: Notification of acceptance; February 20, 2003: Camera-ready papers; February 28, 2003: Preregistration.

Information: email: iglesias@unican.es; <http://personales.unican.es/iglesias/TSCG2003/>.

* 5–8 **Call for Papers: Hawaii International Conference on Statistics and Related Fields**, Sheraton Waikiki Hotel, Honolulu, Hawaii.

Description: The conference will provide many opportunities for academicians and professionals from statistics and related fields to interact with members inside and outside their own particular areas of specialization. Cross-disciplinary submissions are welcome.

Topic Areas: (All areas of statistics and related fields are invited), agricultural statistics, applied statistics, Bayesian statistics, biostatistics, biomedical statistics, business statistics, computational statistics, computer simulations, econometrics, educational statistics, environmental statistics, epidemiology, industrial statistics, management science, mathematical statistics, medical statistics, nonparametric statistics, operations research, probability, psychological measurement and statistics, quantitative methods, statistics, statistical modeling, teaching of statistics, other areas of statistics.

Submission Deadline: January 16, 2003.

Sponsor: Univ. of Hawaii–West Oahu.

Information: Visit <http://www.hicstatistics.org/>, or email: statistics@hicstatistics.org.

* 13–22 **Poisson Geometry, Deformation Quantisation and Group Representations (PQR2003)**, Universersité Libre de Bruxelles, Belgium.

Description: The aim of the meeting is to bring together specialists of the three themes in the title, for a Summer School and a Conference. The Summer School (June 13–17) will consist of short courses (of four or five hours each) by: A. Cattaneo (Formality and Star Products), I. Moerdijk (Lie Groupoids and Lie Algebroids), W/ Schmid (Geometric Methods in Representation Theory) and A. Weinstein (Morita Equivalence in Poisson geometry), together with a broad presentation of Deformation Quantisation by D. Sternheimer. The conference (June 18–22) will consist of lectures and informal interactions.

Invited Participants: D. Arnal, M. Bertelson, R. Brylinski, H. Bursztyn, A. Cattaneo, A. Connes, B. Fedosov, R. Fernandes, C. Fronsdal, E. Getzler, Y. Karshon, M. Kontsevich, B. Kostant, Y. Kosmann-Schwarzbach, P. Lecomte, J.-H. Lu, Y. Maeda, I. Moerdijk, R. Nest, T. Ratiu, J. Rawnsley, W. Schmid, L. Schwachhoefer, C. Simpson, D. Sternheimer, D. Tamarkin, C. Torossian, K. Vilonen, S. Waldmann, A. Weinstein, P. Xu. There will be poster sessions.

Deadlines: Funding for young E. U. researchers or other financial support: apply preferably before December 15, 2002. Guaranteed special price at the conference hotel (90 euros): register before December 31, 2002.

Information: Visit <http://homepages.ulb.ac.be/~pqr2003/>. Registration: pqr2003@ulb.ac.be.

* 23–27 **15th International Conference on Formal Power Series and Algebraic Combinatorics**, Linköping University, Vadstena, Sweden.

Organizing Committee: S. Linusson (Sweden, Chair), H. Barcelo (USA), A. Duval (USA), J. Gill (Sweden), J. Wästlund (Sweden).

Topics: All aspects of combinatorics and their relationship with other parts of mathematics, computer science, physics, and biology.

Invited Speakers: I. Bárány (Hungary), F. Chung (USA), J. Håstad (Sweden), O. Häggström (Sweden), A. Lascoux (France), P. Leroux (Canada), I. Novik (Israel/USA), R. Shamir (Israel), R. Stanley (USA)

Official Languages: English and French.

Deadlines: Paper and poster submission: Extended abstracts of at most twelve pages by November 24, 2002. Software submission: January 15, 2003. Registration: April 1, 2003. Open problem session: June 1, 2003.

Information: <http://www.mai.liu.se/fpsac/> or email: fpsac@mai.liu.se.

* 23–27 **Hyperbolic Models in Astrophysics and Cosmology**, Newton Institute of Mathematical Sciences, Cambridge, UK.

Description: Hyperbolic problems in astrophysics and cosmology (relativistic compressible fluid models, the Einstein field equations of general relativity) are particularly challenging for the applied mathematician. They are essential in order to uncover the structure and formation of the universe. Main topics: general relativity, linear and nonlinear hyperbolic equations, Riemann solvers, shock waves in general relativity, well-posedness theory for the Einstein equations, black hole geometries, interaction of gravity with other force fields, etc.

Sponsors: Newton Institute of Mathematical Sciences, Cambridge, and the European Community.

Information: <http://www.cmap.polytechnique.fr/~lefloch/newton-conf.html> or Philippe G. LeFloch (lefloch@cmap.polytechnique.fr).

July 2003

* 1–10 **PI-Rings: Structure and Combinatorial Aspects (summer course)**, Bellaterra, Barcelona, Spain.

Aim: To introduce students to the structural and combinatorial theory of algebras satisfying polynomial identities (PI-algebras).

Lecturers: V. Drensky (Bulgarian Acad. of Sci.), E. Formanek (Penn. State Univ.).

Program: Structure theorems of Kaplansky, Posner and Artin; Ring of generic matrices; Generic division ring and its relation with the theory of central simple algebras; Structure of the center of the generic division ring; Amitsur-Levitzki theorem; Construction of central polynomials for matrices; Polynomial identities of matrices and their relation with invariant theory; Nagata-Higman theorem; Shirshov theorem; Regev theorem.

Coordinator: F. Cedó.

Scientific Committee: P. Ara, D. Herbera.

Organizing Committee: R. Camps, F. Cedó.

Deadlines: For applications for financial support, April 25; for registration and payment, May 31.

Information: email: PI-rings@crm.es, or visit <http://www.crm.es/PI-rings/>.

* 6–12 **Journées Arithmétiques XXIII**, Universität Graz, Graz, Austria.

Topics: All branches of number theory.

Contact: email: ja03@tugraz.at.

Information: <http://ja03.math.tugraz.at/>.

* 8–11 **Applications of Plausible, Paradoxical, and Neutrosophical Reasoning for Information Fusion (FUSION 2003)**, Radisson Hotel, Cairns, Queensland, Australia.

Topics: Applications of Neutrosophic Logic in Information Fusion, Generalization of Dempster-Shafer Theory of Evidence to DSm Theory.

* 9–12 **2003 Summer Conference on Topology and Its Applications**, Howard University, Washington, DC.

Plenary Speakers: V. Bergelson (Ohio State), W. W. Comfort (Wesleyan Univ.), N. Kamran (McGill Univ.), J. van Mill (Vrije Univ.), P. Olver (Univ. of Minnesota), A. Simpson (Univ. of Edinburgh).

Workshop Leader: S. Todorčević.

Special Sessions: Session in honor of W. Comfort: S. Garcia-Ferreira (Univ. Nacional Autonoma de Mexico), J. Trigos-Arrieta (Calif. State Univ., Bakersfield), G. Woods (Univ. of Manitoba); Set Theoretic Topology: J. Kulesza (George Mason Univ.), A. Dow (Univ. of North Carolina at Charlotte); Topological Dynamics and Ergodic Theory: J. Kennedy (Univ. of Delaware), R. McCutcheon (Univ. of Memphis); Topological Groupoids and Their Applications: J. Leslie (Howard Univ.), T. Robart (Howard Univ.); Topological Groups and Semigroups: K. Hofmann (Tech. Univ. Darmstadt and Tulane Univ.), D. Strauss (Univ. of Hull); Topology and Computer Science: J. Lawson (Louisiana State Univ.), M. Mislove (Tulane Univ.).

Local Organizing Committee: N. Hindman (Howard Univ.), J. Leslie (Howard Univ.), A. Maleki (Howard Univ.), T. Robart (Howard Univ.), S. El-Helaly (Catholic Univ.), J. Kulesza (George Mason Univ.).

Information: <http://members.aol.com/nhindman/sumtopo/>.

* 12–17 **What Comes beyond the Standard Model? Symmetries beyond the Standard Model**, Hotel Histron, Portoroz, Slovenia.

Scope: The experimental and theoretical research in elementary particle physics and cosmology has brought a new understanding of the laws of nature. The standard models of elementary particle physics and cosmology have left many open questions unanswered. New very sophisticated and costly experiments are in preparation which should help answer the open questions and which require very precise predictions. Confrontations between all new ideas as manifested in new approaches, models and theories are therefore needed. The meeting will gather together physicists and mathematicians who have already contributed new ideas and approaches to review the accumulated knowledge and confront new ideas in elementary particle physics, cosmology, and relevant fields of mathematics.

Invited Speakers (list to be completed): R. Aleksan (CEA Saclay, DAPNIA/SPP, Gif-sur-Yvette, France); E. Alvarez (Univ. Autonoma,

Madrid, Spain); I. Antoniadis (CERN, Geneva, Switzerland); L. Bonora (SISSA, Trieste, Italy); M. Duff (Univ. of Michigan, Ann Arbor, USA); R. Jackiw (MIT, Cambridge, USA); D. Kazakov (Joint Inst. for Nuclear Research, Dubna, Russia); E. Kiritsis (Univ. of Crete, Heraklion, Greece); F. Lizzi (Univ. di Napoli Federico II, Italy); J. Madore (Univ. of Paris-Sud, Orsay, France); L. Smolin (Perimeter Inst. for Theoretical Physics, Waterloo, Canada); D. Kreimer (Boston Univ., USA); A. Wassermann (Univ. of Bayreuth, Germany).

Chairs: N. Mankoc-Borstnik (Univ. of Ljubljana, SI), chair; H. B. Nielsen (Niels Bohr Institute, Copenhagen, DK), vice chair.

Deadline: 14 April 2003.

Information: Program and application form: <http://www.esf.org/euresco/03/pc03190/>.

* 21–25 **The Władysław Orlicz Centenary Conference and Function Spaces VII**, Faculty of Mathematics and Computer Science, Adam Mickiewicz University, Poznań, Poland.

Brief Description: This international conference is dedicated to the outstanding mathematician Władysław Orlicz (1903–1990) on the occasion of his birthday centenary. This conference will be joined with the Seventh International Conference on Function Spaces, which will take place at the same time as afternoon sessions. The program of the conference in honor of Orlicz will consist only of twelve 55-minute invited plenary lectures concentrated around scientific traditions of Władysław Orlicz and his influence on contemporary mathematics. Function Spaces VII is devoted to the wide range of problems in the theory of function spaces, in particular to operators and interpolation in function spaces, geometry and topology of function spaces, decomposition of functions, approximation and related topics. The scientific program will consist of invited plenary lectures (50 minutes) and short communications (20 minutes).

Organizing Committee: Z. Palka (chairman), B. Bojarski (vice chairman), S. Janeczko (vice chairman), L. Skrzypczak (secretary).

Deadline: The deadline for abstract submission is March 2003. Further details and information will be available at <http://orlicz.amu.edu.pl/>.

September 2003

* 2–5 **Symposium for the Developments of the Cantorian Set Theory**, Paris, France.

Organizers: F. Collot, R. Saumont, F. Anceau.

Program and Call for Papers: Search of New Axioms for the Set Theory, the Brouwerian Conceptions Revisited, Continuum Hypothesis, Well-Ordering on the Continuum, Generalized Continuum Hypothesis, Problem of the Countable Ordinal Numbers ε , Exotic Irrational Numbers, Nonstandard Analysis, Conway's Numbers, Applications to Computer Science, Quantic Theory, Biology, Cosmology.

Submission: Extended abstracts (at most 6 pages) of papers to be presented at the conference to: F. Collot, 4 rue Mayet 75006, Paris, before June 1, 2003. Abstracts or papers will be published in the journal *Bio-Math*.

Information: email: editions.europeenne@wanadoo.fr.

* 2–6 **The Barcelona Conference on Asymptotic Statistics**, Bellaterra, Barcelona, Spain.

Aim: The aim of the conference is to open a new line of international events devoted to asymptotic methods in statistics.

Topics: Inference for continuous-time stochastic processes, linear and nonlinear time series, wavelets and theory of extreme values.

Main Speakers: D. Boscq (Univ. Paris 6), R. Cao (Univ. de A Coruña), A. V. Ivanov (Internat. Christian Univ., Kyiv), I. Johnstone (Stanford Univ.), R. Khasminskii (Wayne State Univ.), U. Küchler (Humboldt-Universität zu Berlin), Y. Kutoyants (Univ. de Maine) A. Le Breton (Univ. Joseph Fourier), T. Mikosch (Univ. of Copenhagen).

Coordinator: V. Zaiats.

Scientific Committee: Y. Kutoyants, U. Küchler, F. Utzet, and V. Zaiats.

Organizing Committee: F. Utzet, P. Puig, W. González, and V. Zaiats.

Deadlines: For applications for financial support, May 23; for registration and payment, June 30.

Information: email: bas2003@crm.es or visit <http://www.crm.es/bas2003/>.

* 4–9 **Analytic Methods of Analysis and Differential Equations (AMADE-2003)**, Belarusian State University, Minsk, Belarus.

Description: Belarusian State University (BSU) and Institute of Mathematics of Belarusian National Academy of Sciences, together with Moscow State University, organize the 3rd International Conference “Analytic Methods of Analysis and Differential Equations (AMADE-2003)” on September 4–9, 2003, in Minsk, Belarus. The arrival and departure days are September 3 and 10. The conference will be held under the guidance of ISAAC (International Society of Analysis, Applications and Computations).

Topics: Integral Transforms and Special Functions; Differential Equations and Applications; Integral, Difference, Functional Equations and Fractional Calculus; Real and Complex Analysis.

Organizing Committee: I. V. Gaishun (Belarus, cochair), V. A. Il'in (Russia, cochair), A. V. Kozulin (cochair), A. A. Kilbas (Belarus, vice chair), M. V. Dubatovskaya (Belarus, secretary), S. V. Rogosin (Belarus, secretary), H. Begehr (Germany), V. I. Burenkov (Great Britain), V. V. Gorokhovik (Belarus), N. A. Izobov (Belarus), V. I. Korzyuk (Belarus), P. A. Mandrik (Belarus), E. I. Moiseev (Russia), S. G. Samko (Portugal), N. I. Yurchuk (Belarus).

Program Committee: P. Adler (France), M. Dzhenaliev (Kazakhstan), H.-J. Glaeske (Germany), R. Gorenflo (Germany), V. I. Gromak (Belarus), N. K. Karapetyants (Russia), V. S. Kiryakova (Bulgaria), A. I. Kozhanov (Russia), A. Kufner (Czech), Kun Soo Chang (Korea), I. Laine (Finland), O. I. Marichev (USA), V. V. Mityushev (Poland), O. A. Repin (Russia), E. A. Rovba (Belarus), V. N. Rusak (Belarus), M. Saigo (Japan), S. Saitoh (Japan), A. A. Sen'ko (Belarus), A. P. Soldatov (Russia), J. J. Trujillo (Spain), N. A. Virchenko (Ukraine), L. A. Yanovich (Belarus).

Deadline: Let us know by the end of December 2002 about your intention to participate in the conference. Please send the following information: Your name, affiliation and position, mailing address and telephone (fax), email, section title, and title of report to: AMADE-2003, Dept. of Math. and Mech., Belarusian State Univ., Fr. Skaryny Ave. 4, 220050 Minsk 50, Belarus; email: amade@im.bas-net.by and amade@bsu.by; <http://amade.virtualave.net/>.

* 16–20 **The Barcelona Conference on Set Theory**, Bellaterra, Barcelona, Spain.

Aim: To present the latest developments and results in all areas of set theory and their applications to other areas of mathematics.

Topics: Descriptive set theory, inner model theory, forcing, infinite combinatorics, and applications to analysis.

Main Speakers: M. Dzamonja (Univ. of East Anglia), I. Farah (York Univ.), J. Hirschorn (Institut für Formale Logik, Univ. Wien), R. Schindler (Institut für Formale Logik, Univ. Wien), O. Spinas (Christian-Albrechts-Univ. zu Kiel), J. Zapletal (Univ. of Florida, Gainesville).

Coordinator: J. Bagaria.

Program Committee: A. Blass, S. Friedman, S. Todorcevic, and W. H. Woodin.

Local Organizing Committee: D. Asperó, J. Bagaria, R. Bosch, J. Llopis, and J. López-Abad.

Deadlines: For applications for financial support, May 23; for registration and payment, June 30.

Information: email: set-theory@crm.es and website: <http://www.crm.es/set-theory/>.

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.