
Meetings & Conferences of the AMS

PROGRAM ALERT: In order that AMS meeting programs include the most timely information for each speaker, abstract deadlines have been moved to dates much closer to the meeting. What this means is that most meeting programs will appear in the *Notices* **after** the meeting takes place. However, complete meeting programs will be available on e-MATH about two to three weeks after the abstract deadline. ***Remember***, e-MATH is your most comprehensive source for up-to-date meeting information. See <http://www.ams.org/meetings/>.

Manhattan, Kansas

Kansas State University

March 27–28, 1998

Meeting #932

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: January 1998

Program issue of *Notices*: June/July 1998, page 806

Issue of *Abstracts*: Volume 19, Issue 2

Philadelphia, Pennsylvania

Temple University

April 4–6, 1998

Meeting #933

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: February 1998

Program issue of *Notices*: June/July 1998, page 819

Issue of *Abstracts*: Volume 19, Issue 2

Davis, California

University of California

April 25–26, 1998

Meeting #934

Western Section

Associate secretary: Robert J. Daverman

Announcement issue of *Notices*: February 1998

Program issue of *Notices*: June/July 1998, page 831

Issue of *Abstracts*: Volume 19, Issue 2

Chicago, Illinois

DePaul University-Chicago

September 12–13, 1998

Meeting #935

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: June/July 1998

Program issue of *Notices*: November 1998

Issue of *Abstracts*: Volume 19, Issue 3

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: July 21, 1998

Invited Addresses

Vitaly Bergelson, Ohio State University, *Title to be announced.*

Sheldon Katz, Oklahoma State University, *Title to be announced.*

Ralf Spatzier, University of Michigan, *Title to be announced.*

Vladimir Voevodsky, Northwestern University, *Title to be announced.*

Special Sessions

Algebraic Coding (Code: AMS SS C1), **William C. Huffman**, Loyola University of Chicago, and **Vera S. Pless**, University of Illinois at Chicago.

Algebraic Combinatorics: Association Schemes and Related Topics (Code: AMS SS L1), **Sung Yell Song**, Iowa State University.

Algebraic Geometry and Mirror Symmetry (Code: AMS SS N1), **Ezra Getzler** and **Mikhail Kapranov**, Northwestern University, and **Sheldon Katz**, Oklahoma State University.

Commutative Algebra (Code: AMS SS J1), **Irena V. Peeva**, Massachusetts Institute of Technology, and **Michael Stillman**, Cornell University.

Complex Dynamics (Code: AMS SS H1), **Shmuel Friedland**, University of Illinois at Chicago.

Complexity of Geometric Structures on Manifolds (Code: AMS SS F1), **Melvin G. Rothenberg** and **Shmuel A. Weinberger**, University of Chicago.

Ergodic Theory and Topological Dynamics (Code: AMS SS G1), **Roger L. Jones**, DePaul University, and **Randall McCutcheon**, Wesleyan College.

Fourier Analysis (Code: AMS SS E1), **Marshall Ash**, DePaul University, and **Mark A. Pinsky**, Northwestern University.

K-Theory and Motivic Cohomology (Code: AMS SS D1), **Kevin Knudson**, Northwestern University, and **Mark Walker**, University of Nebraska-Lincoln.

Nonlinear Partial Differential Equations (Code: AMS SS O1), **Gui-Qiang Chen** and **Konstantina Trivisa**, Northwestern University.

Number Theory (Code: AMS SS I1), **Jeremy T. Teitelbaum** and **Yuri Tschinkel**, University of Illinois at Chicago.

Orthogonal Polynomial Series, Summability and Conjugates (Code: AMS SS M1), **Calixto P. Calderon**, University of Illinois at Chicago, and **Luis A. Caffarelli**, University of Texas at Austin.

Rigidity in Geometry and Dynamics (Code: AMS SS K1), **Steven E. Hurder**, University of Illinois at Chicago, and **Ralf J. Spatzier**, University of Michigan.

Stochastic Analysis (Code: AMS SS A1), **Richard B. Sowers**, University of Illinois-Urbana, and **Elton P. Hsu**, Northwestern University.

Topics in Mathematics and Curriculum Reform (Code: AMS SS B1), **Richard J. Maher**, Loyola University Chicago.

Accommodations

Participants should make their own arrangements directly with the hotel of their choice and request the DePaul rate. **All rooms will be on a space available basis.** The AMS is not responsible for rate changes or for the quality of the accommodations.

Best Western Grant Park, 1100 S. Michigan Ave.; 312-922-2900; \$62/single or double; two blocks from campus.

Palmer House Hilton, 17 E. Monroe Ave.; 312-917-7348; \$149/single or double.

Ramada Congress Inn, 520 S. Michigan Ave.; 800-635-1666; \$99/single or double; hotel parking.

Food Service

Campus dining facilities: 11th floor, DePaul Center, 7:30 a.m. to 2:30 p.m. Additional restaurants are located within short walking distance.

Local Information

Please visit the Web site maintained by DePaul University at <http://www.depaul.edu/>.

Other Activities

AMS Book Sale: Examine the newest titles from AMS! Most books will be available at a special 50% discount offered only at meetings. Complimentary coffee will be served, courtesy of AMS Membership Services.

Parking

Although DePaul University has no parking facilities of its own in the loop area, there are several municipal parking lots in the area. The cost of parking varies.

Registration and Meeting Information

Registration will take place in the lobby on the 8th floor of the DePaul Center, 1 E. Jackson Blvd., from 7:30 a.m. to 5:00 p.m., Saturday, September 12, and from 8:00 a.m. to 11:00 a.m. on Sunday, September 13. Invited addresses will take place in the Egan Urban Center located in the Administration Center at 243 South Wabash. Special Sessions will take place in the DePaul Center and the Lewis Center.

Registration Fees: (payable on-site only) \$30/AMS members; \$45/nonmembers; \$10/emeritus members, students, or unemployed mathematicians. Fees are payable by cash, check, VISA, MasterCard, Discover, or American Express.

Travel

The DePaul Center is located at the intersection of State Street and Jackson Boulevard. It is well served by public transportation and has many nearby parking garages.

By Air: Inquire upon arrival at O'Hare Airport or Midway Airport for public transportation or car rentals. The following specially negotiated rates are available only for the period September 9-15: 5% discount off first-class and any published USAirways promotional round-trip fare, or 10% discount off unrestricted coach fares with seven-day advance reservations and ticketing required. These dis-

counts are valid providing all rules and restrictions are met and are applicable for travel from the continental U.S., Bahamas, Canada, and San Juan, P.R. Discounts are not combinable with other discounts or promotions. Additional restrictions may apply on international travel. For reservations call (or have your travel agent call) 800-334-8644 between 8:00 a.m. and 9:00 p.m. Eastern Daylight Time. **Refer to Gold File Number 73670341.**

Airport Express vans depart O'Hare every 10 minutes for the 45-minute trip downtown, and from Midway every 15 minutes for the 30-minute trip to downtown.

Driving: From the north and northwest: the campus is accessible from the John F. Kennedy Expressway (I-90/I-94); exit at Jackson Boulevard (300 South) and turn east. The campus is approximately one mile from the expressway at Jackson Blvd.

From the west: The campus is accessible from the Dwight D. Eisenhower Expressway (I-290). As you enter the downtown area, the expressway becomes Congress Parkway. Turn left (north) on Dearborn Street (50 West), go two blocks to Jackson Blvd. (300 South) and turn right (east). DePaul University is one block east on Jackson Blvd. at State Street.

From the south: Take I-90/I-94 exit at Jackson Blvd. (300 South) and turn east. The campus is approximately one mile from the expressway on Jackson Boulevard.

By Train or Bus: All six rapid transit train lines (CTA) service the campus and include the O'Hare/Congress/Douglas (Blue) and Midway/Loop (Orange). From the trains, exit at Jackson Boulevard (300 South). The fare from each airport is \$1.50, and exact change is recommended to simplify entering the train stations.

Weather: The daytime temperatures typically range from 50-70 degrees Fahrenheit, and in the 50 degree range at night. Some light rain is possible.

Winston-Salem, North Carolina

Wake Forest University

October 9-10, 1998

Meeting #936

Southeastern Section
Associate secretary: Robert J. Daverman
Announcement issue of *Notices*: August 1998
Program issue of *Notices*: December 1998
Issue of *Abstracts*: Volume 19, Issue 3

Deadlines

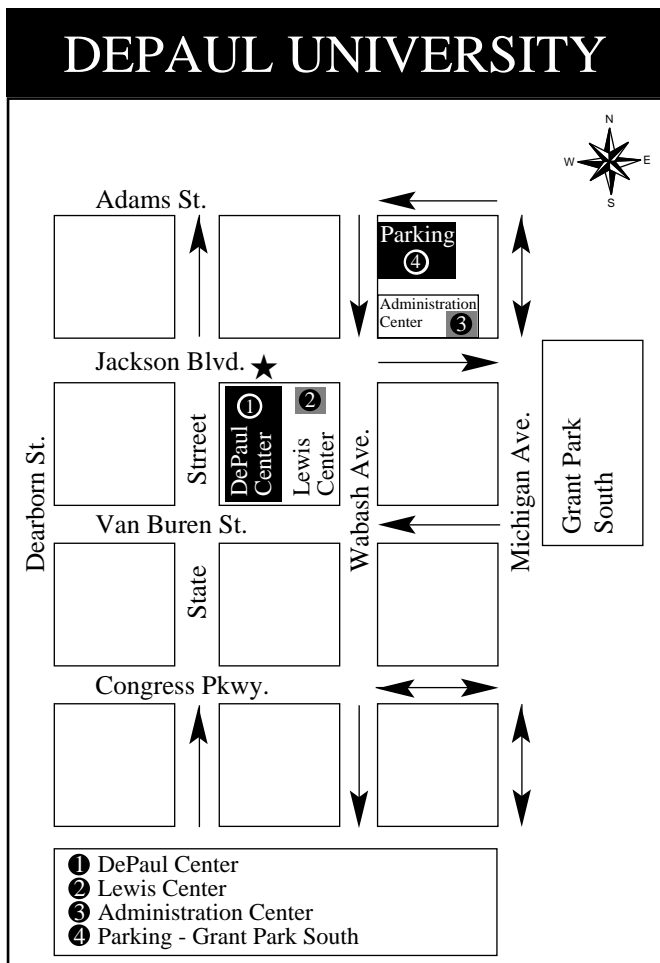
For organizers: Expired
For consideration of contributed papers in Special Sessions: June 23, 1998
For abstracts: August 18, 1998

Invited Addresses

- David F. Anderson**, University of Tennessee, *Unique and nonunique factorization in integral domains.*
- Idris Assani**, University of Carolina, Chapel Hill, *A.e. multiple recurrence and Wiener Wintner dynamical systems.*
- Marcy Barge**, Montana State University, *Structure of attractors.*
- Roger Temam**, Indiana University, *Some mathematical problems related to the equations of the atmosphere and the oceans.*

Special Sessions

- Abelian Groups and Modules* (Code: AMS SS B1), **Ulrich Albrecht**, Auburn University.
- Boundary Value Problems* (Code: AMS SS K1), **John V. Baxley** and **Stephen B. Robinson**, Wake Forest University.
- Combinatorics and Graph Theory* (Code: AMS SS A1), **Bruce Landman**, University of North Carolina.
- Commutative Ring Theory* (Code: AMS SS E1), **David F. Anderson**, University of Tennessee, Knoxville, and **Evan Houston**, University of North Carolina, Charlotte.
- Ergodic Theory* (Code: AMS SS F1), **Idris Assani**, University of North Carolina, Chapel Hill.



Modern Methods in Set Theory and General Topology (Code: AMS SS H1), **Winfried Just** and **Paul Szeptycki**, Ohio University.

Noncommutative Algebra (Code: AMS SS C1), **Ellen Kirkman** and **James Kuzmanovich**, Wake Forest University.

Operator Theory and Holomorphic Spaces (Code: AMS SS L1), **Tavan T. Trent** and **Zhijian Wu**, University of Alabama.

Recent Results on the Topology of Three-Manifolds (Code: AMS SS D1), **Hugh Nelson Howards**, Wake Forest University.

Spectral Theory of Differential Equations and Applications (Code: AMS SS G1), **Dominic Clemence** and **Alexandra Kurepa**, North Carolina A&T University.

Topology in Dynamics (Code: AMS SS J1), **Marcy Barge**, Montana State University-Bozeman, and **Krystyna M. Kuperberg**, Auburn University.

State College, Pennsylvania

Pennsylvania State University

October 24–25, 1998

Meeting #937

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: August 1998

Program issue of *Notices*: January 1999

Issue of *Abstracts*: Volume 19, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: July 7, 1998

For abstracts: September 1, 1998

Invited Addresses

Jeffrey Adams, University of Maryland, College Park, *Title to be announced.*

Nigel D. Higson, Pennsylvania State University, *Title to be announced.*

Tasso J. Kaper, Boston University, *Title to be announced.*

Kate Okikiolu, University of California, San Diego, and MIT, *Title to be announced.*

Special Sessions

C-Algebraic Methods in Geometry and Topology* (Code: AMS SS B1), **Nigel D. Higson**, Pennsylvania State University, and **Erik Guentner** and **John D. Trout Jr.**, Dartmouth College.

Least Squares and Total Least Squares (Code: AMS SS G1), **Jesse L. Barlow**, Pennsylvania State University.

Mathematical Modeling of Inhomogeneous Materials: Homogenization and Related Topics (Code: AMS SS D1), **Leonid Berlyand**, Pennsylvania State University, and **Karl Voss**, Yale University.

Metric Topology (Code: AMS SS F1), **Steve Armentrout**, **Joseph Borzelino**, **Hossein Movahedi-Lankarani**, and **Robert Wells**, Pennsylvania State University.

Modeling of Phase Transitions of Partially Ordered Physical Systems (Code: AMS SS C1), **Maria-Carme T. Calderer**, Pennsylvania State University.

Partitions and q-Series (Code: AMS SS A1), **George E. Andrews** and **Ken Ono**, Pennsylvania State University.

Symplectic Geometry and Quantization (Code: AMS SS E1), **Jean-Luc Brylinski**, **Ranee Brylinski**, **Boris Tsygan**, and **Ping Xu**, Pennsylvania State University.

Tucson, Arizona

University of Arizona-Tucson

November 14–15, 1998

Meeting #938

Western Section

Associate secretary: Robert M. Fossum

Announcement issue of *Notices*: September 1998

Program issue of *Notices*: To be announced

Issue of *Abstracts*: Volume 19, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: July 29, 1998

For abstracts: September 23, 1998

San Antonio, Texas

Henry B. Gonzales Convention Center

January 13–16, 1999

Meeting #939

Joint Mathematics Meetings, including the 105th Annual Meeting of the AMS, 82nd Meeting of the Mathematical Association of America (MAA), annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL).

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: October 1998

Program issue of *Notices*: January 1999

Issue of *Abstracts*: Volume 20, Issue 1

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: August 6, 1998

For abstracts: October 1, 1998

For summaries of papers to MAA organizers: September 4, 1998

Joint Invited Addresses

Jennifer Tour Chayes, Microsoft, *Title to be announced.*

Joan Feigenbaum, AT&T Bell Laboratories, *Department head, algorithms & distributed data.*

Joint Special Sessions

Mathematics and Education Reform (Code: AMS SS M1), **William H. Barker**, Bowdoin College, **Jerry L. Bona**, University of Texas at Austin, **Naomi Fisher**, University of Illinois at Chicago, and **Kenneth C. Millett**, University of California, Santa Barbara.

Model Theory and Its Applications (Code: AMS SS S1), **Anand Pillay**, MSRI and University of Illinois, Urbana.

Research in Mathematics by Undergraduates (Code: AMS SS E1), **John E. Meier** and **Leonard A. VanWyk**, Lafayette College.

The History of Mathematics (Code: AMS SS L1), **Karen H. Parshall**, University of Virginia, and **Victor J. Katz**, University of the District of Columbia.

AMS Invited Addresses

Nancy J. Kopell, Boston University, *Title to be announced* (AMS Josiah Willard Gibbs Lecture).

Sorin Popa, University of California, Los Angeles, *Title to be announced.*

AMS Special Sessions

Banach Spaces of Holomorphic Functions and Operators on These Spaces (Code: AMS SS D1), **Benjamin A. Lotto**, Vas-sar College, and **Pamela B. Gorkin**, Bucknell University.

Bergman Spaces and Related Topics (Code: AMS SS B1), **Peter L. Duren**, University of Michigan, Ann Arbor, and **Michael Stessin**, SUNY at Albany.

Combinatorial Topology (Code: AMS SS K1), **Laura M. Anderson** and **Jonathan P. McCammond**, Texas A&M University.

Commutative Algebra (Code: AMS SS G1), **Scott Thomas Chapman**, Trinity University.

Commutative Algebra and Algebraic Geometry (Code: AMS SS J1), **Roger A. Wiegand**, University of Nebraska and Purdue University, and **Susan Elaine Morey**, Southwest Texas State University.

Computational Algebraic Geometry for Curves and Surfaces (Code: AMS SS R1), **Mika K. Seppala**, Florida State University, and **Emil J. Volcheck**, National Security Agency.

Development of Electronic Communications in Mathematics (Code: AMS SS N1), **Alfonso Castro**, University of North Texas, and **Rafael De La Llave**, University of Texas at Austin.

Discrete Models and Difference Equations (Code: AMS SS T1), **Saber Elaydi**, Trinity University, and **Gerry Ladas**, University of Rhode Island.

Dynamical, Spectral, and Arithmetic Zeta-Functions (Code: AMS SS H1), **Michel L. Lapidus**, University of California, Riverside, and **Machiel van Frankenhuysen**, Institut des Hautes Études Scientifiques.

Geometry in Dynamics (Code: AMS SS F1), **Krystyna Ku-perberg**, Auburn University.

Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry (Code: AMS SS Y1), **Michael K. Rudnev**, The University of Texas at Austin, and **Stephen R. Wiggins**, California Institute of Technology.

Mathematics Education and Mistaken Philosophies of Mathematics (Code: AMS SS U1), **Saunders Mac Lane**, University of Chicago, and **Richard A. Askey**, University of Wisconsin-Madison.

Operator Algebras and Applications (Code: AMS SS P1), **Allan P. Donsig**, University of Nebraska-Lincoln, and **Nik Weaver**, Washington University.

Probabilistic Combinatorics (Code: AMS SS C1), **Béla Bol-lobás**, University of Memphis.

Recent Developments in Differential Geometry (Code: AMS SS V1), **Huai-Dong Cao** and **Jianxin Zhou**, Texas A&M University.

Several Complex Variables (Code: AMS SS A1), **Emil J. Straube** and **Harold P. Boas**, Texas A&M University.

Singularities in Algebraic and Analytic Geometry (Code: AMS SS X1), **Caroline G. Grant**, U.S. Naval Academy, and **Ruth I. Michler**, University of North Texas.

The Functional and Harmonic Analysis of Wavelets (Code: AMS SS Q1), **Lawrence W. Baggett**, University of Colorado, and **David R. Larson**, Texas A&M University.

The Mathematics of the Navier-Stokes Equations (Code: AMS SS W1), **Peter A. Perry** and **Zhong-Wei Shen**, University of Kentucky.

MAA Contributed Papers in San Antonio

The Mathematical Association of America and the American Mathematical Society will hold their annual meetings at the Joint Mathematics Meetings from Wednesday, January 13, 1999, through Saturday, January 16, 1999, in San Antonio, Texas. The complete meetings program will appear in the October 1998 issues of *Focus* and *Notices*. This preliminary announcement is designed to alert participants about the MAA's contributed papers sessions and their deadlines. Please note that the dates scheduled for these sessions remain tentative. The organizers listed below solicit contributed papers pertinent to their sessions; proposals should be directed to the organizer whose name is followed by an asterisk (*). For additional instructions, see the "Submission Procedures" at the end of the list. Sessions generally limit presentations to ten minutes, but selected participants may extend their contributions up to twenty minutes. Each session room contains an overhead projector and screen; blackboards will not be available. You may request one additional overhead pro-

jector, a 35mm slide projector, or a 1/2-inch or 3/4-inch VHS VCR with one color monitor. Persons needing additional equipment should contact, as soon as possible but prior to October 2, 1998: Jim Tattersall, Department of Mathematics and Computer Science, Providence College, Providence, RI 02918; e-mail: tat@providence.edu.

The Use of Technology in Teaching Abstract Mathematics, Wednesday and Friday mornings. **Doug Ensley** (*), Department of Mathematics, Shippensburg University, Shippensburg, PA 17257; phone: 717-532-1431; fax: 717-530-4009; e-mail: deensl@ship.edu.

This session is to provide a forum for exchange among those using computational tools in the teaching of traditionally abstract mathematical topics. Courses affected might include discrete mathematics, abstract algebra, number theory, logic, or analysis. Of particular interest are tools which are built upon standard programming languages or computer algebra systems, since these might be used by a wide audience with minimal additional resources.

Quantitative Literacy, Wednesday and Friday mornings, **Barbara Jur** (*), Department of Mathematics, Macomb Community College, 14500 Twelve Mile Road, Warren, MI 48093; phone: 810-445-7105; fax: 810-445-7298; e-mail: jur@macomb.cc.mi.us; **Rick Gillman**, Valparaiso University; **Jimmy L. Solomon**, Allen E. Pulsion College of Science and Technology; **Linda Sons**, Northern Illinois University.

The session seeks papers describing quantitative literacy (QL) programs—programs that a college has to ensure literacy for ALL its graduates. Also considered will be papers describing lower-division courses, which could be recommendations on QL which will appear on MAA Online.

Teaching Statistics: Teaching the Reasoning and New Technological Tools, Wednesday and Friday mornings, **Dex Whittinghill** (*), Department of Mathematics, Rowan University, Glassboro, NJ 08028; phone: 609-256-4500, x3879; fax: 609-256-4921; e-mail: whittinghill@rowan.edu; **Frank Wattenberg**, National Science Foundation; **Mary Parker**, Austin Community College; **Don Bentley**, Pomona College.

The teaching of statistics has been evolving in recent years. This session will address two important aspects of that evolution. Some authors will discuss experiences teaching statistical reasoning in a variety of undergraduate settings, from Statistics I to the interdisciplinary course. Other authors will discuss novel ways in which they use technology in their courses, possibly including Java-based applet simulations, the TI calculator and the CBL, or interactive uses of the Web.

Mathematics Competitions, Wednesday and Friday mornings, **Harold B. Reiter** (*), Department of Mathematics, University of North Carolina-Charlotte, Charlotte, NC 28223; phone: 704-510-6461; fax: 704-510-6415; e-mail: hbreiter@email.uncc.edu; **Stephen B. Maurer**, Swarthmore College; **William P. Fox**, USMA; **Susan Schwartz Wildstrom**, Montgomery City Schools, MD.

There are many ways to pique student interest in mathematics through problem solving. The major national competitions are well known (Putnam and Mathematical Competition in Modeling at the college level; AHSME, AIME, and USAMO for high schools), but there are many other chal-

lenging activities of differing sorts and varying geographical sweep. We seek talks on various aspects of different sorts of competitions, at both the pre-college and college level. What is your format? How did you get started? How is it funded? How are minorities encouraged? Have you done any follow-up on participants? Do you use the Internet? The MAA Committee on Local and Regional Competitions is running this Special Session as part of a thrust that may also include development of a database on challenge events and a publication that will provide advice for people wishing to begin or improve such events.

Innovations in Teaching Abstract Algebra, Wednesday afternoon, **Vesna Kilibarda** (*), School of Education, Liberal Arts, and Science, University of Alaska Southeast, 11120 Glacier Highway, Juneau, AK 99801-8671; phone: 907-465-6408; fax: 907-465-5159; e-mail: jfvk@acad1.alaska.edu; **Allen C. Hibbard**, Central College; **Ellen Maycock Parker**, DePauw University.

This session invites papers about challenges and opportunities in making abstract algebra more accessible, meaningful, and applicable for our students while maintaining a major goal: to develop mathematical maturity by gradual introduction and development of concepts and careful and rigorous treatment of definitions and proofs. Where appropriate, each presenter is encouraged to describe the context for the talk (where does this fit into an abstract algebra course and what topics have been covered), the technology (if any) required, the method(s) implemented (demonstration, group work, discovery approach, outside project, etc.), and the effect (how did this impact conceptual understanding) of the innovation being discussed.

Ethical, Humanistic, and Artistic Mathematics, Wednesday and Friday afternoons, **Alvin White** (*), Department of Mathematics, Harvey Mudd College, Claremont, CA 91711-5990; phone: 909-621-8867; fax: 909-621-8366; e-mail: awhite@hmc.edu; **Robert P. Webber**, Longwood College; **Stefanos Gialamas**, Illinois Institute of Art.

This session will feature talks that relate mathematics and mathematics teaching to the culture in which they are embedded. Papers discussing any of the three following themes are welcome: (a) ethical dilemmas and considerations in mathematics, (b) humanistic mathematics, (c) teaching mathematics to art students integrating an iconistic approach, guided inquiry, or any other philosophy or methodology. Please state which of the three themes your paper addresses.

Proof in Mathematical Education, Friday afternoon, **Joseph Wimbish** (*), Department of Mathematical Education and Computer Sciences, Huntingdon College, 1500 East Fairview Avenue, Montgomery, AL 36106-2148; phone 334-833-4476; fax: 334-283-5413; e-mail: jwimbish@huntingdon.edu; **Gary Davis**, Research & Graduate School of Education, University of Southampton.

This session invites papers that focus on topics related to proofs of current interest in undergraduate mathematics education. For example: Students'/Teachers' views on proof. How do students learn to prove theorems? How do students see "doing" proofs? How do they make the transition from strictly algorithmic activity to definition-theorem-proof?

Geometry in the Classroom in the Next Millennium, Thursday and Saturday mornings, **Colm Mulcahy** (*), Department of Mathematics, Spelman College, P.O. Box 373, Atlanta, GA 30314; phone: 404-223-7627; fax: 404-223-7662; e-mail: colm@spelman.edu; **David Henderson**, Cornell University; **Barry Schiller**, Rhode Island College.

Geometry, though one of mathematics' oldest branches, lives and has exciting new applications! This session welcomes papers on innovations in teaching college geometry at all levels, including courses for liberal arts, undergraduate majors (where students may be future researchers), and for preparing future and in-service K-12 teachers. We encourage presentations illustrating the evolving nature of geometry, its interaction with science and technology, its role in the curriculum, the incorporation of new results, pedagogical issues, and the use of technology.

Discrete Mathematics Revisited, Thursday and Saturday mornings, **Richard K. Molnar** (*), Department of Mathematics, Macalester College, St. Paul, MN 55105; phone: 612-696-6338; e-mail: molnar@macalester.edu; **Suzanne M. Molnar**, College of St. Catherine.

Before Calculus Reform, discrete mathematics was going to save undergraduate mathematics. This session will focus on ways in which discrete mathematics can serve as an entry into the curriculum, how it serves client disciplines such as biology and computer science, and how specific topics have influenced undergraduate research. Of special interest are constructive approaches to learning, discrete models, and the use of technology in the communication, doing, and teaching of discrete mathematics.

Projects That Work in Applied Mathematics Courses, Thursday and Saturday afternoons, **Alexandra Kurepa** (*), Department of Mathematics, North Carolina A&T State University, Greensboro, NC 27411; phone: 336-334-7822; fax: 336-334-7283; e-mail: kurepaa@ncat.edu; **Henry War-chall**, University of North Texas.

Typically a large number of students in the applied mathematics courses are nonmathematics majors. This session presents examples of interdisciplinary projects that link the students' major fields of study to applied mathematics. Applied problems drawn from such fields as engineering, physics, biology, chemistry, music, graphic design, and others that enliven the presentation of important mathematical concepts will be included. Projects that resulted from interdisciplinary research and team-teaching are particularly appropriate.

Innovative Use of Distance Learning Techniques to Teach Post-secondary Mathematics, Thursday and Saturday afternoons, **Brian E. Smith** (*), Department of Statistics, Faculty of Management, McGill University, 1001 Sherbrooke St. West, Montreal, QC, Canada H3A 1G5; phone: 514-398-4038; fax: 514-398-3876; e-mail: smithb@management.mcgill.ca; **Marcelle Bessman**, Jacksonville University.

The purpose of this session is to present teaching methods in mathematics using distance learning. Examples of existing distance education programs, as well as new and innovative techniques, are solicited. Of particular interest is a discussion of successful models of distance learning and also an analysis of concerns and difficulties experienced by educators who work in this medium. This session is or-

ganized on behalf of the MAA Committee on Computers in Mathematics Education.

Integrating Mathematics and Other Disciplines, Thursday and Saturday afternoons, **William McCallum** (*), Department of Mathematics, University of Arizona, Tucson, AZ 85721; phone: 621-520-6886; e-mail: wmc@math.arizona.edu; **Nicholas Losito** and **Yajun Yang**, SUNY Farmingdale.

Papers are invited describing (a) undergraduate courses or programs that are interdisciplinary in nature or (b) model examples of how applications of mathematics in other professions can be incorporated into undergraduate mathematics courses. Interdisciplinary courses should have a substantial mathematical component and a direct link to a discipline other than mathematics. Model examples of applications from other disciplines should show how the incorporation of these applications enhances mathematical understanding and increases the usefulness of the course to students not majoring in mathematics. These other disciplines might include the physical sciences, engineering, the social sciences, the arts, and the humanities. The session is organized on behalf of the CUPM Subcommittee on Calculus Reform and the First Two Years.

The Integral Role of the Two-Year College in the Preservice Preparation of Elementary School Teachers, Thursday and Saturday afternoons, **Mercedes McGowen** (*), Department of Mathematics, William Rainey Harper College, Palatine, IL 60067-7398; phone: 847-925-6526; fax: 847-925-6049; e-mail: mmcgowen@harper.cc.il.us; **Joanne Peebles**, El Paso Community College; **William E. Haver**, Virginia Collaborative for Excellence in the Preparation of Teachers.

Two-year colleges have an integral role in the preparation of elementary school teachers, given the many students who complete all of their mathematics content course requirements at a community college. This session invites presentations which describe innovative practices and activities that focus on the strengthening of undergraduate content courses, the recruitment of students into teacher preparation programs, and other implementation initiatives. We are particularly interested in reports of collaborative models developed in partnership by two-year colleges and four-year institutions, as well as other joint activities which have been beneficial to both parties.

Submission Procedures for MAA Contributed Papers

After you have selected a session to which you wish to contribute a paper, forward the name(s) and address(es) of the author(s) and a one-page summary of your paper directly to the organizer (indicated above with an (*)). The summary should enable the organizer(s) to evaluate the appropriateness of your paper for the selected session. Consequently, you should include as much detailed information as possible within the one-page limitation.

Your summary must reach the designated organizer by Friday, September 4, 1998. Submission of proposals via e-mail is preferred.

The organizer will acknowledge receipt of all summaries. If the organizer accepts your paper, you will receive in-

structions about preparing an abstract. Please submit completed abstracts to the AMS by Thursday, October 1, 1998. Abstracts received after the deadline will not be published in the booklet of abstracts available in the meetings registration area during the meetings in San Antonio.

Gainesville, Florida

University of Florida

March 12–13, 1999

Meeting #940

Southeastern Section

Associate secretary: Robert J. Daverman

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: June 11, 1998

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Invited Addresses

Alexander N. Dranishnikov, University of Florida, *Title to be announced.*

Gregory F. Lawler, Duke University, *Title to be announced.*

Michael P. Loss, Georgia Institute of Technology, *Title to be announced.*

John G. Thompson, University of Florida, *Title to be announced.*

Special Sessions

Analytical Problems in Mathematical Physics (Code: AMS SS M1), **Eric A. Carlen**, Georgia Institute of Technology, and **Laszlo Erdos**, New York University-Courant Institute.

Computability Theory (Code: AMS SS G1), **Douglas Cenzer**, University of Florida, **Geoffrey Louis LaForte**, University of West Florida, and **Rick L. Smith**, University of Florida.

Continuum Theory and Dynamical Systems (Code: AMS SS A1), **Philip Boyland** and **Beverly Brechner**, University of Florida, and **John Mayer**, University of Alabama at Birmingham.

Finite Groups and Their Representations (Code: AMS SS D1), **Alexandre Turull**, University of Florida.

Galois Theory (Code: AMS SS E1), **J. G. Thompson** and **H. Voelklein**, University of Florida.

Geometric Topology (Code: AMS SS H1), **James E. Keesling** and **Alexander N. Dranishnikov**, University of Florida.

Groups and Geometries (Code: AMS SS F1), **Chat Ho** and **Peter Sin**, University of Florida.

Linear Operator Theory (Code: AMS SS J1), **Leiba Rodman**, College of William & Mary, and **Scott A. McCullough**, University of Florida.

Markov Processes and Potential Theory (Code: AMS SS C1), **Joe Glover** and **Murali Rao**, University of Florida.

Partial Differential Equations and Applications (Code: AMS SS K1), **Gang Bao** and **Yun-mei Chen**, University of Florida.

Structure and Representation Theory of Lattice-Ordered Groups and f -Rings (Code: AMS SS L1), **Jorge Martinez**, University of Florida.

The Erdős Legacy and Connections to Florida (Code: AMS SS B1), **Krishnaswami Alladi** and **Jean Larson**, University of Florida.

Urbana, Illinois

University of Illinois, Urbana-Champaign

March 18–21, 1999

Meeting #941

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: June 18, 1998

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Invited Addresses

Alexander Beilinson, MIT, *Title to be announced.*

Alexandra Bellow, Northwestern University, *Title to be announced.*

Igor Krichever, Columbia University, *Title to be announced.*

Steven Rallis, Ohio State University, *Title to be announced.*

Trevor Wooley, University of Michigan, *Title to be announced.*

Special Sessions

Diophantine Equations, Inequalities and Related Arithmetic Problems (Code: AMS SS F1), **Michael Bennett**, University of Illinois-Urbana, and **Trevor Wooley**, University of Michigan.

Elementary and Analytic Number Theory (Code: AMS SS E1), **Harold G. Diamond** and **A. J. Hildebrand**, University of Illinois-Urbana.

Galois Representations (Code: AMS SS C1), **Nigel Boston**, University of Illinois-Urbana, and **Michael Larsen**, University of Missouri.

Graph Theory (Code: AMS SS G1), **Douglas B. West**, University of Illinois-Urbana.

Martingales and Analysis (Code: AMS SS D1), **Joseph Max Rosenblatt**, **Renming Song**, and **Richard B. Sowers**, University of Illinois-Urbana.

Nonstandard Analysis (Code: AMS SS B1), **C. Ward Henson** and **Peter Loeb**, University of Illinois-Urbana.

Recent Progress in Elementary Geometry (Code: AMS SS A1), **John E. Wetzel**, University of Illinois-Urbana, and **Clark Kimberling**, University of Evansville.

Las Vegas, Nevada

University of Nevada-Las Vegas

April 10–11, 1999

Meeting #942

Western Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: July 10, 1998

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Special Sessions

Analysis and Geometry (Code: AMS SS I1), **Peter Li** and **Song-Ying Li**, University of California, Irvine.

Combinatorial Theory (Code: AMS SS G1), **Kequan Ding**, University of Illinois-Urbana, **Peter Shiue**, University of Las Vegas, Nevada, and **Yeong-Nan Yeh**, Academia Sinica.

Control and Dynamics of Partial Differential Equations (Code: AMS SS A1), **Zhonghai Ding**, University of Nevada-Las Vegas.

Diophantine Problems (Code: AMS SS J1), **Arthur Baragar**, University of Nevada-Las Vegas, and **Michael Bennett**, University of Illinois.

Geometric Group Theory (Code: AMS SS H1), **Eric M. Freeden**, Southern Utah University, and **Eric Lewis Swenson**, Brigham Young University.

Graph Theory (Code: AMS SS B1), **Hung-Lin Fu**, University of National Chiao-Tung University, Taiwan, **Chris A. Rodger**, Auburn University, and **Michelle Schultz**, University of Nevada-Las Vegas.

Nonlinear PDEs—Methods and Applications (Code: AMS SS C1), **David Costa**, University of Nevada-Las Vegas.

Number Theory (Code: AMS SS F1), **Gennady Bachman**, University of Nevada-Las Vegas, **Richard A. Mollin**, University of Calgary, and **Peter J. Shiue**, University of Nevada-Las Vegas.

Numerical Analysis and Computational Mathematics (Code: AMS SS E1), **Jun Zhang**, University of Minnesota and Uni-

versity of Kentucky, and **Jennifer Zhao**, University of Michigan, Dearborn.

Set Theory (Code: AMS SS D1), **Douglas Burke** and **Derrick BuBose**, University of Nevada-Las Vegas.

Buffalo, New York

State University of New York at Buffalo

April 24–25, 1999

Meeting #943

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: July 24, 1998

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Invited Addresses

Michele M. Audin, University of Louis Pasteur, *Title to be announced.*

Russel Cafilisch, University of California, Los Angeles, *Title to be announced.*

Jeff Smith, Purdue University, *Title to be announced.*

Alexander Voronov, MIT, *Title to be announced.*

Gregg J. Zuckerman, Yale University, *Title to be announced.*

Special Sessions

Combinatorics and Graph Theory (Code: AMS SS C1), **Harris Kwong**, SUNY College at Fredonia.

Smooth Categories in Geometry and Mechanics (Code: AMS SS A1), **F. William Lawvere**, SUNY at Buffalo.

Thin Films: Solid and Liquid (Code: AMS SS B1), **E. Bruce Pitman**, SUNY at Buffalo, and **Brian Spencer**, State University of New York at Buffalo.

Melbourne, Australia

Melbourne, Australia

July 12–16, 1999

Meeting #944

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Invited Addresses

Jennifer Tour Chayes, Microsoft, *Title to be announced.*

Michael Eastwood, University of Adelaide, *Title to be announced.*

Vaughan Jones, University of California, Berkeley, *Title to be announced.*

Hyam Rubinstein, Melbourne University, *Title to be announced.*

Richard M. Schoen, Stanford University, *Title to be announced.*

Neil Trudinger, Australian National University, *Title to be announced.*

Special Sessions

Fluid Dynamics (Code: AMS SS C1), **Susan Friedlander**, Northwestern University, and **Roger H. J. Grimshaw**, Monash University.

Geometric Themes in Group Theory (Code: AMS SS A1), **Gustav I. Lehrer**, University of Sydney, **Cheryl E. Praeger**, University of Western Australia, and **Stephen D. Smith**, University of Illinois at Chicago.

Low Dimensional Topology (Code: AMS SS D1), **William H. Jaco**, Oklahoma State University, and **Hyam Rubinstein**, Melbourne University.

Mathematical Physics-Quantum Field Theory (Code: AMS SS B1), **Alan L. Carey**, University of Adelaide, **Paul A. Pearce**, University of Melbourne, and **Mary Beth Ruskai**, University of Massachusetts, Lowell.

Probability Theory and Its Applications (Code: AMS SS E1), **Timothy Brown**, University of Melbourne, **Phil Pollett**, University of Queensland, and **Ruth J. Williams**, University of California, San Diego.

Providence, Rhode Island

Providence College

October 2-3, 1999

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: January 6, 1999

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Austin, Texas

University of Texas at Austin

October 8-10, 1999

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: January 6, 1999

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Invited Addresses

Mikhail Kapranov, Northwestern University, *Title to be announced.*

John Roe, Oxford University and Pennsylvania State University, *Title to be announced.*

Catherine Sulem, University of Toronto, *Title to be announced.*

Tatiana Toro, University of Washington, *Title to be announced.*

Washington, District of Columbia

Marriott Wardman Park Hotel and Omni Shoreham Hotel

January 19-22, 2000

Joint Mathematics Meetings, including the 106th Annual Meeting of the AMS, 83rd Meeting of the Mathematical Association of America (MAA), with minisymposia and other special events contributed by the Society for Industrial and Applied Mathematics (SIAM), and the annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM).

Associate secretary: Robert M. Fossum

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 20, 1999

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

For summaries of papers to MAA organizers: To be announced

Lowell, Massachusetts

University of Massachusetts, Lowell

April 1–2, 2000

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: July 1, 1999

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Notre Dame, Indiana

University of Notre Dame

April 7–9, 2000

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: July 7, 1999

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Toronto, Ontario, Canada

University of Toronto

September 22–24, 2000

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: To be announced

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

New Orleans, Louisiana

New Orleans Marriott and ITT Sheraton New Orleans Hotel

January 10–13, 2001

Joint Mathematics Meetings, including the 107th Annual Meeting of the AMS, 84th Meeting of the Mathematical Association of America (MAA), annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM).

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 11, 2000

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

For summaries of papers to MAA organizers: To be announced

Columbia, South Carolina

University of South Carolina

March 16–18, 2001

Southeastern Section

Associate secretary: Robert J. Daverman

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: June 15, 2000

For consideration of contributed papers in Special Sessions: To be announced

For abstracts: To be announced

Williamstown, Massachusetts

Williams College

October 13–14, 2001

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program issue of *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: January 11, 2001
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

San Diego, California

San Diego Convention Center

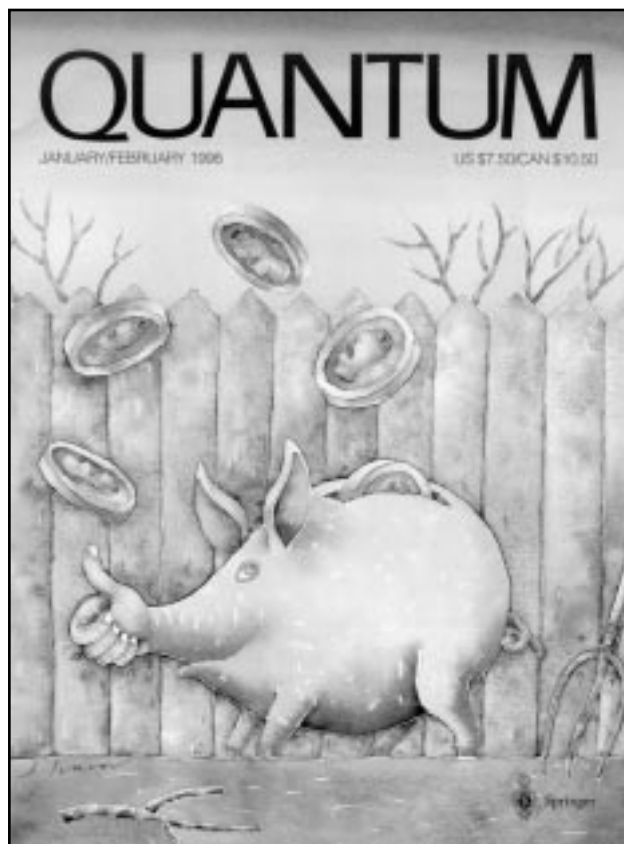
January 6-9, 2002

Joint Mathematics Meetings, including the 108th Annual Meeting of the AMS and 85th Meeting of the Mathematical Association of America (MAA).

Associate secretary: Robert J. Daverman
Announcement issue of *Notices*: To be announced
Program issue of *Notices*: To be announced
Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 4, 2001
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced
For summaries of papers to MAA organizers: To be announced



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