
Meetings & Conferences of the AMS

IMPORTANT INFORMATION REGARDING MEETINGS PROGRAMS: AMS Sectional Meeting programs do not appear in the print version of the *Notices*. However, comprehensive and continually updated meeting and program information with links to the abstract for each talk can be found on e-MATH. See <http://www.ams.org/meetings/>. Programs and abstracts will continue to be displayed on e-MATH in the Meetings and Conferences section until about three weeks after the meeting is over. Final programs for Sectional Meetings will be archived on e-MATH in an electronic issue of the *Notices* as noted below for each meeting.

Toronto, Ontario Canada

University of Toronto

September 23–24, 2000

Meeting #957

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: August 2000

Program first available on e-MATH: August 10, 2000

Program issue of electronic *Notices*: November 2000

Issue of *Abstracts*: Volume 21, Issue 3

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: Expired

Invited Addresses

John H. Conway, Princeton University, *New ways to look at quadratic forms* (Erdős Memorial Lecture).

George Elliott, University of Toronto, *A brief survey of structure and classification theory for amenable C^* -algebras*.

Benson Farb, University of Chicago, *Group actions and Helly's Theorem*.

Boris Tsygan, Pennsylvania State University, *Index theorems, formality theorems, and homotopy algebras*.

Special Sessions

Analytic Number Theory, **John Friedlander**, University of Toronto, and **Steve Gonek**, University of Rochester.

Applied Categorical Structures, **Joan Wick Pelletier** and **Walter Tholen**, York University.

Commutative Algebra and Algebraic Geometry, **Anthony Geramita**, Queens University, and **William Traves**, United States Naval Academy.

Computational Wavelet Analysis, **Sebastian Ferrando** and **Larry Kolasa**, Ryerson Polytechnic University.

Discrete and Applied Geometry, **Asia Ivic Weiss** and **Walter Whiteley**, York University.

Ergodic Theory and Dynamical Systems, **Andres del Junco**, University of Toronto, and **Blair Madore**, SUNY, Potsdam.

Functional Differential Equations and Applications, **Anatoli F. Ivanov**, Pennsylvania State University, and **Jianhong Wu**, York University.

Hamiltonian Systems, **Lisa Jeffrey**, **Velimir Jurdjevic**, and **Boris Khesin**, University of Toronto.

Modern Schubert Calculus, **Nantel Bergeron**, York University, and **Frank Sottile**, University of Wisconsin.

Nonabsolute Integration, **Patrick Muldowney**, University of Ulster, and **Erik Talvila**, University of Illinois, Urbana.

Noncommutative Geometry, **Ryszard Nest**, University of Copenhagen, and **Victor Nistor** and **Boris Tsygan**, Pennsylvania State University.

Nonlinear Functional Analysis, **Sankatha Singh** and **Bruce Watson**, Memorial University of Newfoundland.

Operator Algebras and Operator Theory, **Man-Duen Choi** and **George Elliott**, University of Toronto.

Probability, **Neal Madras**, **George L. O'Brien**, **Thomas Salisbury**, and **Donna Salopek**, York University.

Pseudo-differential Operators, Wavelet Transforms and Related Topics, **M. W. Wong**, York University.

Representation Theory of Infinite Dimensional Lie Algebras, **Yun Gao**, York University.

Set Theory and Set-Theoretic Topology, **Franklin D. Tall**, University of Toronto.

San Francisco, California

San Francisco State University

October 21–22, 2000

Meeting #958

Western Section

Associate secretary: **Bernard Russo**

Announcement issue of *Notices*: August 2000

Program first available on e-MATH: September 11, 2000

Program issue of electronic *Notices*: December 2000

Issue of *Abstracts*: Volume 21, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: Expired

Invited Addresses

Steven N. Evans, University of California, Berkeley, *Title to be announced.*

Lisa J. Fauci, Tulane University, *Title to be announced.*

Kristin Lauter, Microsoft Corporation, *Title to be announced.*

Special Sessions

Abstract Wavelet Theory, **Lawrence W. Baggett**, University of Colorado, and **Kathy D. Merrill**, The Colorado College.

Algebraic and Geometric Combinatorics, **Jesus De Loera**, University of California, Davis, and **Frank Sottile**, University of Wisconsin.

Automorphic Forms and Representations, **Ehud Moshe Baruch**, University of California Santa Cruz, **Dan Bump**, Stanford University, and **Olav Richter**, University of California Santa Cruz.

Banach Algebras, **Suren Grigoryan**, Kazan State University, and **Thomas Tonev**, University of Montana-Missoula.

Diagrammatic Morphisms in Algebra, Category Theory, and Topology, **David Radford**, University of Illinois at Chicago, **Fernando Souza**, Los Alamos National Laboratory

and University of Illinois at Chicago, and **David Yetter**, Kansas State University.

Geometric and Symbolic Dynamical Systems, **Arek Goetz**, San Francisco State University, and **Luca Zamboni**, University of North Texas.

Harmonic Analysis, **Christoph Thiele**, University of California, Los Angeles, and **Thomas Wolff**, California Institute of Technology.

History of Mathematics, **Shawnee McMurrin**, University of Redlands, and **James J. Tattersall**, Providence College.

Holomorphic Spaces, **Sheldon Axler** and **Alex Schuster**, San Francisco State University.

Low Genus Curves and Applications, **Kristin Lauter**, Microsoft, and **Harold Stark**, University of California San Diego.

Nonlinear Evolution Equations, **Lev Kapitanski**, Kansas State University, and **Gustavo Ponce**, University of California Santa Barbara.

Operator Algebras, **Steve Kaliszewski** and **John Quigg**, Arizona State University.

Periodic and/or Multiple Solutions of Differential and Difference Equations, **Jorge Aarao** and **Mario Martelli**, Claremont McKenna College, and **Adolfo Rumbos**, Pomona College.

Quantum Algebra, **Nicolai Reshetikhin**, University of California, Berkeley.

Singularities and Algebraic Geometry, **Caroline Melles**, United States Naval Academy, and **Ruth Michler**, University of North Texas.

Topics in Probability, with Emphasis on Markov Chains and Random Matrices, **Steve Evans**, University of California, Berkeley, **Amir Dembo**, Stanford University, and **Yuval Peres**, University of California, Berkeley.

New York, New York

Columbia University

November 4–5, 2000

Meeting #959

Eastern Section

Associate secretary: **Lesley M. Sibner**

Announcement issue of *Notices*: September 2000

Program first available on e-MATH: September 28, 2000

Program issue of electronic *Notices*: December 2000

Issue of *Abstracts*: Volume 21, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: September 12, 2000

Invited Addresses

Paula Cohen, Université des Sciences et Technologies de Lille, France, *Equidistribution on Shimura varieties and applications*.

Brian Greene, Columbia University, *String theory and quantum geometry*.

Sergey Novikov, University of Maryland, College Park, and Landau Institute for Theoretical Physics, *Graphs: Spectral theory, symplectic geometry, solitons*.

Alexander I. Suci, Northeastern University, *Topology of hyperplane arrangements*.

Special Sessions

Algebraic Geometry (Code: AMS SS H1), **Sorin Popescu** and **Lev A. Borisov**, Columbia University.

Arithmetic Geometry and Modular Forms (Code: AMS SS D1), **Dorian Goldfeld**, Columbia University, and **Paula Cohen**, University of Lille.

Arrangements of Hyperplanes (Code: AMS SS C1), **Michael J. Falk**, Northern Arizona University, and **Alexander I. Suci**, Northeastern University.

Combinatorial Group Theory (Code: AMS SS A1), **Gilbert Baumslag**, **Sean T. Cleary**, **Alexei Myasnikov**, and **Vladimir Shpilrain**, City College (CUNY).

Commutative Algebra (Code: AMS SS F1), **Irena Peeva**, Cornell University, and **Luchezar Avramov**, Purdue University.

Differential Algebra and Related Topics (Code: AMS SS E1), **Li Guo** and **William Keigher**, Rutgers University at Newark, and **William Sit**, City College (CUNY).

Nonlinear Partial Differential Equations (Code: AMS SS J1), **Zheng-Chao Han**, Rutgers University, and **A. Shadi Tahvildar-Zadeh**, Princeton University.

Riemannian Manifolds and Their Limit Spaces (Code: AMS SS K1), **Xiaochun Rong**, Rutgers University, and **Christina Sormani**, Lehman College, CUNY.

Symbolic Computation and Kleinian Groups (Code: AMS SS G1), **Jane P. Gilman**, Rutgers University, and **Mika K. Sepala**, Florida State University.

The Topology of 3-Manifolds (Code: AMS SS B1), **Joan S. Birman**, **Brian S. Magnus**, and **Walter D. Neumann**, Barnard College.

Workshop on Differential Algebra and Related Topics

Participants in the meeting may be interested in this workshop to be held November 2–3, 2000, at Rutgers University at Newark, Newark, New Jersey, organized by Phyllis Cassidy, Smith College; Li Guo, Rutgers University at Newark; William Keigher, Rutgers University at Newark; and William Sit, City College (CUNY).

This international workshop will bring together experts from different areas related to differential algebra to give expository talks on their fields. The purpose of this workshop is to disseminate the methods and results of differential algebra to other areas, to encourage potential collaborations, and to attract graduate students and new

researchers. In order to bring the participants further up to date on the most current research, there will be a Special Session on the same subject at the AMS meeting at Columbia University immediately following this workshop.

The topics to be covered include the history of differential algebra, differential Galois theory, differential algebraic geometry, differential algebraic groups, computational differential algebra, applications to arithmetic geometry, applications to control theory, difference algebra and Baxter algebra.

Confirmed speakers are Manuel Bronstein, INRIA, France; Phyllis Cassidy; Richard Churchill, Hunter College (CUNY); Henri Gillet, University of Illinois at Chicago; Jerald Kovacic, Prolifics, Inc.; Andy Magid, University of Oklahoma; E. L. Mansfield, University of Kent, United Kingdom; Sally Morrison, Bucknell University; Michael Singer, North Carolina State University; William Sit; and Marius van der Put, University of Groningen, the Netherlands.

For more information contact Li Guo, liguo@newark.rutgers.edu, or William Keigher, keigher@newark.rutgers.edu, or see the Web page at <http://newark.rutgers.edu/~nwkmath/diffalg.html>.

Birmingham, Alabama

University of Alabama-Birmingham

November 10–12, 2000

Meeting #960

Southeastern Section

Associate secretary: John L. Bryant

Announcement issue of *Notices*: September 2000

Program first available on e-MATH: October 5, 2000

Program issue of electronic *Notices*: January 2001

Issue of *Abstracts*: Volume 21, Issue 4

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: September 19, 2000

Invited Addresses

Nick Alikakos, University of Tennessee and University of Athens, *Title to be announced*.

Ivan Cherednik, University of North Carolina at Chapel Hill, *Double Hecke algebras, Q -Gauss integrals, and Gaussian sums*.

Vladimir Temlyakov, University of South Carolina, *Greedy algorithms in nonlinear approximation*.

Xin Zhou, Duke University, *Perturbation theory on integrable systems*.

Special Sessions

Analytical Problems in Mathematical Physics (Code: AMS SS E1), **Roger T. Lewis**, University of Alabama at Birmingham, **Michael P. Loss**, Georgia Institute of Technology, and **Marcel Griesemer**, University of Alabama at Birmingham.

Billiards and Related Topics (Code: AMS SS C1), **Nikolai I. Chernov** and **Nandor Simanyi**, University of Alabama at Birmingham.

Differential Operators and Function Spaces (Code: AMS SS P1), **R. C. Brown**, University of Alabama-Tuscaloosa, and **D. B. Hinton**, University of Tennessee, Knoxville.

Dynamics and Low-Dimensional Topology (Code: AMS SS G1), **Alexander M. Blokh**, **Lex G. Oversteegen**, and **John C. Mayer**, University of Alabama at Birmingham.

Integrable Systems and Riemann-Hilbert Problems (Code: AMS SS N1), **Xin Zhou**, Duke University, and **Kenneth McLaughlin**, University of Arizona.

Inverse Problems (Code: AMS SS A1), **Ian Walker Knowles** and **Rudi Weikard**, University of Alabama at Birmingham.

Nonlinear Differential Equations and Applications (Code: AMS SS H1), **James R. Ward Jr.**, University of Alabama at Birmingham, and **Wenzhang Huang**, University of Alabama at Huntsville.

Nonlinear Methods in Approximation (Code: AMS SS K1), **Vladimir N. Temlyakov**, University of South Carolina.

Nonlinear Partial Differential Equations and Applications (Code: AMS SS J1), **Dehua Wang**, University of Pittsburgh, and **Yanni Zeng**, University of Alabama at Birmingham.

Operator Algebras and Their Representations (Code: AMS SS F1), **Alan Hopenwasser**, University of Alabama, and **Justin R. Peters**, Iowa State University.

Operators and Function Theory on Holomorphic Space (Code: AMS SS M1), **James L. Wang** and **Zhijian Wu**, University of Alabama.

Relations Between Spectral Theory and Analytic Number Theory (Code: AMS SS B1), **Robert M. Kauffman**, University of Alabama at Birmingham, and **Martin N. Huxley**, Cardiff University, Wales.

Spectral and Transport Problems in Solid State Physics (Code: AMS SS D1), **Peter D. Hislop**, University of Kentucky, and **Yulia Karpeshina** and **Gunter H. Stolz**, University of Alabama at Birmingham.

Wavelets, Frames, Sampling, and Time-Frequency Representations (Code: AMS SS L1), **Akram Aldroubi**, Vanderbilt University.

Hong Kong, People's Republic of China

Hong Kong Baptist University

December 13–16, 2000

Meeting #961

First Joint International Meeting between the AMS and the Hong Kong Mathematical Society.

Associate secretary: Bernard Russo

Announcement issue of *Notices*: June 2000

Program first available on e-MATH: Not applicable

Program issue of electronic *Notices*: Not applicable

Issue of *Abstracts*: None

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: Expired

Invited Addresses

Jianshu Li, Hong Kong University of Science and Technology, *Title to be announced.*

Thomas Liggett, University of California Los Angeles, *Title to be announced.*

Ngai Ming Mok, University of Hong Kong, *Title to be announced.*

Gilles Pisier, Univ of Paris 6 and Texas A&M University, *Title to be announced.*

Michael Shub, IBM, *Title to be announced.*

Gang Tian, Massachusetts Institute of Technology, *Title to be announced.*

Special Sessions

Combinatorial and Computational Methods in Commutative Algebra and Algebraic Geometry, **Vladimir Shpilrain**, CUNY, City College, and **Jie-Tai Yu**, University of Hong Kong.

Combinatorics and Graph Theory, **Beifang Chen**, Hong Kong University of Science and Technology, **Jeong Han Kim**, Microsoft, USA, and **Che Bor Lam**, Hong Kong Baptist University.

Geometric Analysis, **Peter Li**, University of California, Irvine, and **Luen Fai Tam** and **Tom Wan**, Chinese University of Hong Kong.

Integrable Systems, **Jishan Hu**, Hong Kong University of Science and Technology, **Wen Xiu Ma**, City University of Hong Kong, **Peter Olver**, University of Minnesota, and **Min Yan**, Hong Kong University of Science and Technology.

Iterative Methods in Scientific Computation, **Michael Ng**, University of Hong Kong, and **Robert Plemmons**, Wake Forest University.

Low Dimensional Topology, **Iain Aitchison** and **Hyam Rubinstein**, University of Melbourne.

Mathematics of Learning Theory, **Felipe Cucker** and **Stephen Smale**, City University of Hong Kong.

Mathematics of Optimization, **Kung Fu Ng**, Chinese University of Hong Kong, and **Jong-shi Pang**, Johns Hopkins University.

Nonlinear Elliptic and Parabolic Partial Differential Equations, **Kai Seng Chou**, Chinese University of Hong Kong, **Yanyan Li**, Rutgers University, and **Juncheng Wei**, Chinese University of Hong Kong.

Nonlinear Waves, **Zhouping Xin**, Courant Institute of Mathematical Sciences and Chinese University of Hong Kong, and **Xiaoping Wang**, Hong Kong University of Science and Technology.

Numerical methods for Partial Differential Equations, **Susanne Brenner**, University of South Carolina, and **Jun Zou**, Chinese University of Hong Kong.

Optimization and Applications, **Kok Lay Teo** and **X. Q. Yang**, Hong Kong Polytechnic University.

Representation Theory, **Jian Shu Li** and **Jinsong Huang**, Hong Kong University of Science and Technology.

Theoretical and Numerical Aspects of Nonlinear Conservation Laws, **Tao Tang**, Hong Kong Baptist University, and **Zhouping Xin**, Courant Institute of Mathematical Sciences and Chinese University of Hong Kong.

Value Distribution Theory and Complex Dynamics, **Chung Chun Yang**, Hong Kong University of Science and Technology, and **William Cherry**, University of North Texas.

New Orleans, Louisiana

New Orleans Marriott and Sheraton New Orleans Hotel

January 10–13, 2001

Meeting #962

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), and the winter meeting of the Association for Symbolic Logic (ASL).

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: October 2000

Program first available on e-MATH: November 1, 2000

Program issue of electronic *Notices*: January 2001

Issue of *Abstracts*: Volume 22, Issue 1

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: Expired

For abstracts: October 3, 2000

For summaries of papers to MAA organizers: September 15, 2000

Joint Invited Addresses

Barry Mazur, Harvard University, *Deformations, perturbations and near-misses in geometry, physics, and number theory*, Friday, 11:10 a.m. (AMS-MAA).

Jeffrey R. Weeks, Canton, N.Y., *Measuring the universe*, Wednesday, 11:10 a.m. (AMS-MAA).

Joint Special Sessions

History of Mathematics (Code: AMS SS K1), **Karen H. Parshall**, University of Virginia, and **David E. Zitarelli**, Temple University (AMS-MAA); Friday and Saturday mornings and afternoons.

Mathematics and Education Reform (Code: AMS SS X1), **Naomi Fisher**, University of Illinois at Chicago, **William H. Barker**, Bowdoin College, **Jerry L. Bona**, University of Texas at Austin, and **Kenneth C. Millett**, University of California, Santa Barbara (AMS-MAA-MER); Wednesday and Thursday mornings and afternoons.

AMS-MAA Joint Sessions

The NSF National Science, Mathematics, Engineering, and Technology Education Digital Library Program: A Report on Current Activities and Projects, Thursday, 2:45 p.m.–4:15 p.m. organized by **Lee L. Zia** and **James H. Lightbourne**, NSF Division of Undergraduate Education. In this panel discussion presenters will describe the current portfolio of projects being supported by the program. Representatives of selected projects will report on their progress to date and general issues for course and curriculum content developers will be addressed. Funding opportunities will also be discussed. Panelists include **Lang Moore**, Duke University; **Gene Klotz**, Swarthmore College and mathforum.com; and **Robby Robson**, Oregon State University. Sponsored by the AMS and MAA.

Prize Session and Reception: In order to showcase the achievements of the recipients of various prizes, the AMS and MAA are cosponsoring this event at 4:25 p.m. on Thursday. A cash bar reception will immediately follow. All participants are invited to attend. The AMS will announce the winners of the Levi L. Conant Prize, the Ruth Lyle Satter Prize in Mathematics, the Leroy P. Steele Prizes, the Oswald Veblen Prize in Geometry, and the Albert Leon Whiteman Memorial Prize. The AWM will present the Louise Hay Award for Contributions to Mathematics Education, and the Alice T. Schafer Prize for Excellence in Mathematics by an Undergraduate Woman. The MAA prizes include the Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching of Mathematics, the Chauvenet Prize, the Yueh-Gin Gung and Dr. Charles Y. Hu Award for Distinguished Service to Mathematics, and Certificates of Meritorious Service.

This session also will be the venue for the announcement of the Joint Policy Board for Mathematics Communication Award and the Leonard M. and Eleanor B. Blumenthal Award for the Advancement of Research in Pure Mathematics.

Teaching Math and the World Wide Web, Friday, 9:00 a.m.–10:30 a.m., organized by **Andrew G. Bennett**, Kansas State University, and **Judith Lee Baxter**, University of Illinois, Chicago. There has been an explosion of interest in using the World Wide Web to support or enhance the teaching of mathematics among both mathematicians and administrators. Different faculty are using the Web to provide textural information, live animations, automated online homework systems, real world problems, interactive chat rooms, and many other resources. Many interesting projects are going on, but most are developing independently. There is no central site or journal where mathematicians can go to find out what other people are trying, what works, what doesn't, and how to effectively integrate new Web-based technologies into instruction. This session would provide a forum for faculty to share their experiences and to learn from each other. Panelists include **Judith Lee Baxter**, University of Illinois at Chicago, (moderator); **Andrew G. Bennett**, Kansas State University; **Thomas F. Banchoff**, Brown University; **Susan Holmes**, Stanford University; and **Gene Klotz**, Swarthmore College. Sponsored by the AMS and MAA.

Philosophy of Mathematics: That Which is of Interest to Mathematicians, Saturday, 1:00 p.m.–2:30 p.m., organized by **Joseph Auslander**, University of Maryland, and **Bonnie Gold**, Monmouth University. The twentieth century diversion of philosophy of mathematics into questions of foundations and the nature of numbers resulted in many mathematicians losing interest in the subject. However, there are many philosophical questions which the mathematical community appears to care about, such as the relationship between mathematics and the (physical) world, the role of aesthetic considerations in the development of new mathematics, the value of experimental mathematics, and how central proof is for mathematics. Evidence of this interest is the regular review in AMS and MAA publications of books on the philosophy of mathematics. This panel attempts to begin a dialogue between mathematicians interested in philosophical questions and philosophers of mathematics. Panelists include **Chandler Davis**, University of Toronto; **Reuben Hersh**, University of New Mexico; **Saunders Mac Lane**, University of Chicago; and **Kenneth Manders**, University of Pittsburgh. Sponsored by the AMS and MAA.

107th Annual Meeting of the AMS

AMS Invited Addresses

Bonnie Berger, Massachusetts Institute of Technology, *Title to be announced*, Thursday, 2:15 p.m.

Martin R. Bridson, Mathematical Institute, Oxford, England, *Title to be announced*, Friday, 10:05 a.m.

Ingrid Daubechies, Princeton University, *Analog-to-digital conversion: A case study of interaction between mathematicians and electrical engineers*, Saturday, 2:15 p.m.

Igor B. Frenkel, Yale University, *Title to be announced*, Friday, 9:00 a.m.

Ronald L. Graham, University of California San Diego, *Title to be announced* (AMS Josiah Willard Gibbs Lecture), Wednesday, 8:30 p.m.

Mark L. Green, University of California Los Angeles, *New perspectives on algebraic cycles*, Thursday, 3:20 p.m.

Michael J. Hopkins, MIT, *Title to be announced*, Wednesday, 10:05 a.m.

János Kollár, Princeton University, *Title to be announced* (AMS Colloquium Lecture), Wednesday, Thursday, and Friday, 1:00 p.m.

AMS Special Sessions

Analysis on Infinite Dimensional Spaces (in honor of Leonard Gross) (Code: AMS SS N1), **Hui-Hsiung Kuo** and **Ambar N. Sengupta**, Louisiana State University; Friday and Saturday mornings, and Saturday afternoon.

Analytic Number Theory (Code: AMS SS P1), **Dorian Goldfeld**, Columbia University; Friday and Saturday mornings and afternoons.

Applications of Mathematics to Human Physiology and Medicine (Code: AMS SS BB1), **James Cassatt**, National Institutes of Health, and **Michael C. Reed**, Duke University; Friday and Saturday mornings and afternoons.

Asymptotic Behavior of Difference Equations with Applications (Code: AMS SS F1), **Vlajko L. Kocic**, Xavier University, **Abdul-Aziz Yakubu**, Howard University, and **Gerasimos Ladas**, University of Rhode Island; Wednesday and Thursday mornings, and Wednesday afternoon.

Braid Groups and Configuration Spaces (Code: AMS SS L1), **Daniel C. Cohen** and **Neal W. Stoltzfus**, Louisiana State University; Wednesday and Thursday mornings, and Wednesday afternoon.

Commutative Rings and Monoids (Code: AMS SS G1), **Scott T. Chapman**, Trinity University, and **Evan G. Houston**, University of North Carolina at Charlotte; Wednesday morning, and Wednesday and Thursday afternoons.

Computational Algebraic Geometry for Curves and Surfaces (Code: AMS SS B1), **Mika K. Seppala**, Florida State University, and **Emil J. Volcheck**, National Security Agency; Friday and Saturday mornings, and Friday afternoon.

Discovery Learning: The Moore Method in American Mathematics (Code: AMS SS D1), **John W. Neuberger**, University of North Texas, and **Judy A. Kennedy**, University of Delaware; Wednesday morning.

Discrete Geometry (Code: AMS SS Y1), **Andras Bezdek**, Auburn University; Friday and Saturday afternoons, and Saturday morning.

Function Theory, Differential Equations and Functional Equations (Code: AMS SS H1), **Gary G. Gundersen**, University of New Orleans, **Ilpo Laine**, University of Joensuu, and **Enid M. Steinbart**, University of New Orleans; Wednesday and Thursday mornings, and Thursday afternoon.

Geometric Group Theory (Code: AMS SS A1), **Stephen G. Brick** and **Igor Mineyev**, University of South Alabama, and **Jon M. Corson**, University of Alabama; Wednesday and Thursday afternoons, and Thursday morning.

Geometry and Topology of Low Dimensional Manifolds (Code: AMS SS M1), **Slawomir Kwasik** and **Terry Lawson**, Tulane University; Friday and Saturday mornings, and Friday afternoon.

Graduate and Postdoctoral Education in Arithmetical Algebraic Geometry: The Arizona Winter School (Code: AMS SS V1), **Douglas L. Ulmer** and **William G. McCallum**, University of Arizona; Wednesday morning, and Wednesday and Thursday afternoons.

Group Cohomology and Applications to Homotopy Theory and Representation Theory (Code: AMS SS J1), **Alejandro Adem**, University of Wisconsin, Madison, and **Jon F. Carlson**, University of Georgia; Friday and Saturday mornings, and Friday afternoon.

Integral Transforms (Code: AMS SS T1), **Gestur Olafsson**, Louisiana State University, **Gunter Lumer**, University of Mons-Hainaut, and **Frank Neubrander**, Louisiana State University; Friday and Saturday mornings and afternoons.

Integrals and Series throughout Mathematics (Code: AMS SS E1), **Victor H. Moll**, Tulane University, and **George Boros**, University of New Orleans; Wednesday and Thursday mornings, and Wednesday afternoon.

Interaction of Inverse Problems and Image Analysis (Code: AMS SS Z1), **M. Zuhair Nashed**, University of Delaware, and **Otmar Scherzer**, Ludwig-Maximilians-Universität München; Friday morning, and Friday and Saturday afternoons.

Model Theory (Code: AMS SS AA1), **Steven A. Buechler** and **Sergei Starchenko**, University of Notre Dame; Thursday morning and afternoon.

Nonlinear Evolution Equations and Applications (Code: AMS SS W1), **Ralph A. Saxton**, University of New Orleans, **David H. Wagner**, University of Houston, and **Katarzyna Saxton**, Loyola University; Wednesday and Thursday mornings and afternoons.

Operator Theory on Function Spaces (Code: AMS SS Q1), **Zhijian Wu**, University of Alabama, and **Dechao Zheng**, Vanderbilt University; Wednesday and Thursday mornings, and Wednesday afternoon.

PDE Models in Population Biology and Epidemiology (Code: AMS SS U1), **J. M. Cushing**, University of Arizona, **Eric T. Funasaki**, Georgia Southern University, **Shandelle M. Henson**, College of William and Mary, and **Anna Maria Spagnuolo**, Texas A&M University; Wednesday and Thursday afternoons, and Thursday morning.

Partial Differential Equations and Geometric Implications (Code: AMS SS R1), **Vladimir E. Shklover**, Northwestern University; Friday and Saturday afternoons, and Saturday morning.

Representation Theory of Finite and Algebraic Groups (Code: AMS SS C1), **Zongzhu Lin**, Kansas State University, **Daniel K. Nakano**, Utah State University, and **Cornelius Pillen**, University of South Alabama; Wednesday and Thursday afternoons, and Thursday morning.

Stochastic Analysis and Applications (Code: AMS SS S1), **Padmanabhan Sundar** and **Guillermo S. Ferreyra**, Louisiana

State University; Friday morning, and Friday and Saturday afternoons.

AMS Contributed Papers

There will be sessions for contributed papers of ten minutes' duration. Contributed papers will be grouped by related Mathematical Subject Classifications into sessions insofar as possible. The author(s) and their affiliation(s) and the title of each paper accepted will be listed in the program along with the date and time of presentation. Abstracts will be published in *Abstracts Presented to the American Mathematical Society* and should be submitted electronically. Send a blank message to `abs-submit@ams.org` and type `help` as the subject to see your electronic options. See the beginning of this announcement for pertinent deadlines.

Other AMS Sessions

Committee on the Profession Panel Discussion, Wednesday, 4:30 p.m.-6:00 p.m.

Committee on Science Policy Panel Discussion, Friday, 2:30 p.m.-4:00 p.m.

Committee on Science Policy Government Speaker, Friday, 4:20 p.m.-5:10 p.m.

Committee on Education Panel Discussion, Saturday, 8:30 a.m.-10:00 a.m.

Other AMS Events

Council Meeting, Tuesday, 1:00 p.m.-10:00 p.m.

Business Meeting, Saturday, 11:45 a.m.-12:15 p.m. The Secretary notes the following resolution of the Council: Each person who attends a Business Meeting of the Society shall be willing and able to identify himself as a member of the society. In further explanation, it is noted that each person who is to vote at a meeting is thereby identifying himself as and claiming to be a member of the American Mathematical Society. The society has a Committee on the Agenda for Business Meetings. The purpose is to make business meetings orderly and effective. The committee does not have legal or administrative power. It is intended that the committee consider what may be called "quasipolitical" motions. The committee has several possible courses of action on a proposed motion, including but not restricted to:

- (a) doing nothing,
- (b) conferring with supporters and opponents to arrive at a mutually accepted amended version to be circulated in advance of the meeting,
- (c) recommending and planning a format for debate to suggest to a business meeting,
- (d) recommending referral to a committee, and
- (e) recommending debate followed by referral to a committee.

There is no mechanism that requires automatic submission of a motion to the committee. However, if a motion has not been submitted through the Committee, it may be thought reasonable by a business meeting to refer it rather than to act on it without benefit of the advice of the Committee. The committee consists of Robert J. Daverman (chair), Raymond L. Johnson, and Robert K. Lazarsfeld.

In order that a motion for this business meeting receives the service offered by the Committee in the most effective manner, it should be in the hands of the Secretary by December 13, 2000.

AMS Short Course

Please see the article on page 1214 on this conference scheduled for Monday and Tuesday, January 8 and 9, on *Mathematical Biology*, organized by **James Sneyd**, Massey University, New Zealand.

84th Annual Meeting of the MAA

MAA Invited Addresses

Robert F. Almgren, University of Toronto, *Financial derivatives and PDEs*, Friday, 2:15 p.m.

Hyman Bass and Deborah H. Ball, University of Michigan, Ann Arbor, *title to be announced*, Wednesday, 3:20 p.m.

Ralph Keeney, University of Southern California, *Building and using mathematical models to guide decision making*, Friday 7:30 p.m.–8:20 p.m. (Student Lecturer).

Peter D. Lax, Courant Institute, New York University, *title to be announced*, Thursday, 10:05 a.m.

Ivars Peterson, *Science News*, *A kaleidoscope of mathematics and art*, Saturday, 10:05 a.m.

Eleanor Robson, University of Oxford, *Neither Sherlock Holmes nor Babylon: A reassessment of Plimpton 322*, Wednesday, 2:15 p.m.

Peter Winkler, AT&T Bell Laboratories, *Collisions and percolation*, Saturday, 9:00 a.m.

MAA Minicourses

Minicourses are open only to persons who register for the Joint Meetings and pay the Joint Meetings registration fee in addition to the appropriate minicourse fee. If the only reason for registering for the Joint Meetings is to gain admission to a minicourse, please make a notation on your registration form. If the minicourse is fully subscribed or cancelled, a full refund will be made of the Joint Meetings advance registration fee (otherwise subject to the 50% rule). The MAA reserves the right to cancel any minicourse that is undersubscribed.

Minicourse #1: *Creating materials using "real-world" data*, Part A: Wednesday, 8:00 a.m.–10:00 a.m.; Part B: Friday, 8:00 a.m.–10:00 a.m., organized by **Janet L. Andersen**, **Todd M. Swanson**, and **Elliot A. Tanis**, Hope College. We will discuss the advantages and disadvantages of using materials based on "real data", give examples, talk about the process of developing such materials, and give participants an opportunity to create their own materials. Participants will be provided with resource materials, access to electronic databases, and samples of materials we have created. The focus will be on creating problem sets for lower-level courses (general education courses, precalculus, calculus, multivariable calculus, and statistics). Enrollment limit is 30; cost is \$85.

Minicourse #2: *WeBWorK, an Internet-based system for generating and delivering homework problems to students*, Part A: Wednesday, 2:15 p.m.–4:15 p.m.; Part B: Friday, 1:00 p.m.–3:00 p.m., organized by **Arnold K. Pizer**, **Michael**

E. Gage and **Vicki Roth**, University of Rochester. This minicourse introduces participants to WeBWorK, a freely available system that comes with an extensive library of problems. WeBWorK won the 1999 ICTCM Award for Excellence and Innovation with the Use of Technology in Collegiate Mathematics. Supported by a grant from NSF, WeBWorK has already been adopted by a number of universities. Participants will actively participate in using WeBWorK and writing WeBWorK problems. Readers can learn more about WeBWorK by connecting to <http://www.math.rochester.edu/webwork/>. Enrollment limit is 30; cost is \$85.

Minicourse #3: *Teaching contemporary statistics with active learning*, Part A: Thursday, 10:15 a.m.–12:15 p.m.; Part B: Saturday, 3:15 p.m.–5:15 p.m., organized by **Allan J. Rossman**, Dickinson College; **Beth L. Chance**, California Polytechnic State University, San Luis Obispo; **Robin H. Lock**, St. Lawrence University; and **Mary R. Parker**, Austin Community College. In keeping with the recommendations of the ASA/MAA Committee on Undergraduate Statistics, this minicourse will help instructors to teach statistical thinking with more data and concepts, less theory and fewer recipes. Participants will engage in hands-on investigations that can be adopted for immediate use with students. These activities concern such topics as data collection, exploratory data analysis, randomness, and statistical inference. Other issues considered include student projects, authentic assessment, and resources for teaching statistics. Enrollment limit is 30; cost is \$85.

Minicourse #4: *The Global Classroom: Using the Web as an interactive learning environment*. Part A: Thursday, 8:00 a.m.–10:00 a.m.; Part B: Saturday, 8:00 a.m.–10:00 a.m., organized by **Marcelle Bessman**, Jacksonville University, and **Douglas A. Quinney**, Keele University, UK. The Global Classroom is a seamless learning environment that supports live audio-visual interaction and collaboration on commonly used mathematical or other software between students in a class in one location and visitor(s) and/or students at another. It is a medium for distance learning, virtual office hours, participation in remote seminars and colloquia, and collaborative research. Minicourse participants will have the opportunity to experience the Global Classroom as both visiting instructor and recipient student. Enrollment limit is 30; cost is \$85.

Minicourse #5: *Creating and exporting computer animations to the Web*. Part A: Thursday, 1:00 p.m.–3:00 p.m.; Part B: Saturday, 1:00 p.m.–3:00 p.m., organized by **William D. Emerson**, **Louis A. Talman**, and **Bradford Kline**, Metropolitan State College of Denver. Minicourse participants will use Mathematica to develop animations that illustrate concepts from the undergraduate curriculum and will learn to export these animations to the Web via QuickTime. A modest familiarity with Mathematica or other computer algebra systems is assumed. We will conduct this minicourse in a computer laboratory, but participants are welcome to supply their own laptops equipped with Mathematica(≥3.0). Enrollment limit is 30; cost is \$85.

Minicourse #6: *Computation and discovery in the number theory classroom*. Part A: Wednesday, 4:30 p.m.–6:30 p.m.; Part B: Friday, 3:15 p.m.–5:15 p.m., organized by

Clifford A. Reiter, Lafayette College. While proofs remain central to number theory, technology offers opportunities for discovering theorems and investigating conjectures in the number theory classroom. The instructor has developed several J-based computer classroom laboratories which will be shared with participants. No experience with J is expected. Sample lab topics include the sieve of Eratosthenes and twin primes, discovering quadratic reciprocity and public key codes. Participants are expected to share their ideas, reactions, and experiences. Enrollment limit is 30; cost is \$85.

Minicourse #7: Cwatsets: A research experience for undergraduates. Part A: Wednesday, 8:00 a.m.–10:00 a.m.; Part B: Thursday, 8:00 a.m.–10:00 a.m., organized by **Gary J. Sherman**, Rose-Hulman Institute of Technology. Cwatsets are group-like subsets of binary n -space with surprising algebraic and combinatorial properties whose applications range from statistics to graph theory. We will survey the undergraduate-driven theory of cwatsets, discuss cwatsets as a capstone topic for a discrete mathematics or abstract algebra course, and present an extensive inventory of research questions suitable for undergraduates and their teachers. Participants will receive a packet of technical reports, papers, examples, and questions. See <http://www.cwatsets.org/> for more details. Enrollment limit is 50; cost is \$55.

Minicourse #8: Teaching graduate students how to teach using case studies. Part A: Wednesday, 2:15 p.m.–4:15 p.m.; Part B: Friday 1:00 p.m.–3:00 p.m., organized by **Solomon Friedberg**, Boston College, and **Deborah Hughes Hallett** and **William G. McCallum**, University of Arizona. Many graduate programs are considering the problem of how to best prepare their graduate students for the work force, not solely in research or applications of mathematics but also in teaching mathematics. The case study method gets teaching assistants to think about their teaching by presenting realistic scenarios that engender lively discussion of important classroom issues. The case studies used in this minicourse were developed by the Boston College Mathematics Case Studies Project. Enrollment limit is 50; cost is \$55.

Minicourse #9: Making liberal arts mathematics the most important course students take to learn effective thinking. Part A: Thursday, 8:00 a.m.–10:00 a.m.; Part B, Saturday, 8:00 a.m.–10:00 a.m., organized by **Edward B. Burger**, Williams College, and **Michael Starbird**, University of Texas at Austin. Mathematics contains great ideas and employs powerful methods of analysis that transcend mathematics. Topics such as infinity, the fourth dimension, probability, and chaos spark everyone's imagination. These ideas are comparable to masterpieces of art, literature, or philosophy. Our challenge is to convey the genuine ideas of classical and new mathematics and the important strategies of analysis. This minicourse allows participants to discover and experience hands-on methods for bringing deep mathematical results and techniques to life. Enrollment limit is 60; cost is \$55.

Minicourse #10: Developing your department's assessment plan. Part A: Friday, 8:00 a.m.–10:00 a.m.; Part B: Saturday, 8:00 a.m.–10:00 a.m., organized by **William G.**

Marion, Valparaiso University, and **Bonnie Gold**, Monmouth University. Most universities, and thus individual departments, are under pressure from accrediting agencies to develop and implement assessment plans to assess student learning. During this minicourse, pairs (or larger groups) of members of a mathematical sciences department will develop, in workshop format, a proposed departmental mission statement and the skeleton of its individualized assessment plan. Sample assessment programs will be discussed and participants will share ideas with groups from similar departments to develop their own program. Enrollment limit is 45; cost is \$55.

Minicourse #11: The mathematics of decision making. Part A: Thursday, 1:00 p.m.–3:00 p.m.; Part B: Saturday, 1:00 p.m.–3:00 p.m., organized by **Deborah Hughes Hallett**, **William G. McCallum**, and **Richard B. Thompson**, University of Arizona. This course will address the question of what mathematical skills are needed by beginning undergraduates in business and management programs, and show how those needs can be met through the case study method. We will present four case studies, covering material from probability and calculus through decisions on loan foreclosure, pricing stock options, bidding on oil leases, and pricing disk drives. Each presentation will include business background, mathematical and computer tools needed, and pedagogical issues. Enrollment limit is 50; cost is \$55.

Minicourse #12: Contemporary college algebra: A reform program. Part A: Wednesday, 8:00 a.m.–10:00 a.m.; Part B: Friday, 8:00 a.m.–10:00 a.m., organized by **Donald B. Small**, U.S. Military Academy; and **Dorothy Hunter**, Huston-Tillotson College. This minicourse will take participants on a typical journey through a college algebra reform program. The trip will include small group project presentations, graphing calculator required assignments, writing assignments and assessment techniques. Participants will receive a collection of existing small group projects and will create at least one new small group project during the minicourse. Some familiarity with a graphing calculator will be helpful but not a prerequisite. Enrollment limit is 50; cost is \$55.

Minicourse #13: Getting students involved in undergraduate research. Wednesday, Part A: 2:15 p.m.–4:15 p.m.; Part B: Friday, 1:00 p.m.–3:00 p.m., organized by **Aparna W. Higgins**, University of Dayton; **Joseph A. Gallian**, University of Minnesota, Duluth; and **Stephen G. Hartke**, Rutgers University. This course will cover many aspects of facilitating research by undergraduates, such as finding appropriate problems, deciding how much help to provide, and presenting and publishing the results. Examples will be presented of research in summer programs and research that can be conducted during the academic year. Although the examples used will be primarily in the area of discrete mathematics, the strategies discussed can be applied to any area of mathematics. Enrollment limit is 40; cost is \$55.

Minicourse #14: Discrete dynamical systems, mathematics, methods, and models. Part A: Thursday, 1:00 p.m.–3:00 p.m.; Part B: Saturday, 1:00 p.m.–3:00 p.m.,

organized by **Frank R. Giordano** COMAP; **David C. Arney**, U.S. Military Academy; **John S. Robertson**, Georgia College & State University; and **Maurice D. Weir**, Naval Postgraduate School. The workshop treats linear and nonlinear difference equations, matrix algebra, and systems of difference equations and their mathematical models at the introductory freshman level. Ideas for organizing courses at the freshman and scholastic levels will be discussed, as well as a transition to a calculus course. Ideas for incorporating projects and technology will be presented. Modeling applications include a wide range of disciplines. Handouts of transparencies and projects will be provided. Enrollment limit is 50; cost is \$55.

MAA Contributed Paper Sessions

See the complete descriptions and instructions on how to participate in these sessions beginning on p. 1013 in the September issue of the *Notices*, in the May/June issue of *FOCUS* or at http://www.ams.org/amsmtgs/2025_maaca11.html.

Great Theorems of Mathematics, **Cheryl L. Olsen** and **Douglas E. Ensley**, Shippensburg University; Wednesday and Thursday mornings.

Chaotic Dynamics and Fractal Geometry, **Denny Gulick**, University of Maryland, College Park, and **Jon W. Scott**, Montgomery College; Wednesday and Thursday mornings.

Innovative Uses of the World Wide Web in Teaching Mathematics, **Marcelle Bessman**, Jacksonville University, and **Brian E. Smith**, McGill University; Wednesday and Thursday afternoons.

Redefining What a Modern "College Algebra" Experience Means, **Sheldon P. Gordon**, SUNY at Farmingdale; **Florence S. Gordon**, New York Institute of Technology; **Arlene H. Kleinstein**, SUNY at Farmingdale; **Mary Robinson**, University of New Mexico, Valencia Campus; **Linda H. Boyd**, Georgia Perimeter College; and **Barbara A. Jur**, Macomb Community College; Wednesday and Thursday mornings.

Innovative Practices in Statistics Education, **Mary M. Sullivan**, Rhode Island College; **Carolyn K. Cuff**, Westminster College; and **Mary T. Parker**, Austin Community College; Friday and Saturday mornings.

Courses and Programs that Illustrate Recommendations of the Mathematical Education of Teachers Document, **Judith L. Covington**, Louisiana Southern University-Shreveport; Wednesday and Thursday mornings

Integrating Mathematics and Other Disciplines, **William G. McCallum**, University of Arizona; **Deborah Hughes Hallett**, University of Arizona; and **Yajung Yang**, SUNY, Farmingdale; Friday and Saturday mornings.

Serving the Needs of Developmental Students: Who Are They, Where Do They Come From, Where Do They Go? **Suzanne Dorée**, Augsburg College, and **Bonnie Gold**, Monmouth University; Wednesday and Thursday afternoons.

The Undergraduate Seminar in Mathematics, **Barry J. Arnow** and **George A. Avirappattu**, Kean University of New Jersey; Wednesday afternoon.

Computer Algebra Systems in Upper-Division Mathematics Courses, **Kent M. Neuerburg**, Southeastern Louisiana University, and **Andrew Stuart Lang**, Oral Roberts University; Friday morning.

Implementation of National Projects on Local Campuses, **Stuart Boersma**, Alfred University, and **Constant J. Goutziers**, SUNY at Oneonta; Saturday morning.

Classroom Demonstrations and Course Projects that Make a Difference, **David R. Hill**, Temple University; **Sarah L. Mabrouk**, Boston University; and **Lila F. Roberts**, Georgia Southern University; Friday morning.

Putting the "Service" Back into Service Courses, **Thomas L. Moore**, Grinnell College, and **Ahmed I. Zayed**, University of Central Florida; Saturday morning.

College Mathematics in Depth with Dynamic Mathematics Software, **E. Paul Goldenberg**, Education Development Center, Newton, MA; **Jean-Marie Laborde**, Laboratoire Leibnitz, Grenoble, France; and **Barbara Pence**, San Jose State University; Saturday morning.

Topics in Teaching, Learning, and Exploring Proof, **Connie M. Campbell**, Millsaps College; **Draga D. Vidakovic**, Georgia State College; and **G. Joseph Wimbish**, Huntingdon College; Wednesday afternoon.

Mathematics in the Age of Euler, **V. Frederick Rickey**, United States Military Academy, and **William W. Dunham**, Muhlenberg College; Thursday afternoon.

Outreach Programs for Women and Girls, **Kathleen A. Sullivan**, Seattle University, and **Elizabeth G. Yanik**, Emporia State University; Friday morning

ARUME Session, **Julie M. Clark**, Emory & Henry College; Wednesday and Thursday mornings.

General Contributed Paper Session, **Howard L. Penn**, United States Naval Academy; Wednesday and Thursday afternoons.

Other MAA Sessions

The Muse of History: Writing Biographies of Mathematicians, Wednesday, 9:00 a.m.–10:30 a.m., organized by **Ronald Calinger**, the Catholic University of America. Can we get at history as it actually happened, and how closely can a biographer hope to capture the essence of a mathematical scientist? Is there objective biography, and can historians be independent of preconceptions? What is the character of mathematics that sets it apart from other kinds of historical and biographical writing? Is there an optimal way to avoid confusing past and present categories? In examining the richness and limitations of primary sources and secondary works, what are the most fruitful analytical techniques? How much technical detail and information about personal life should appear in a clear, successful biography? Through referring to studies of Euler, de Morgan, Cantor, Robinson, and others, this session will explore the rapid changes occurring in preparing biographies of mathematicians. The panel will include **Joseph Dauben**, City University of New York; **Joan Richards**, Brown University; and **Ronald Calinger**. **Manfred Kronfellner**, Technical University, Vienna, will be a commentator.

On Line Assessment, Wednesday, 9:00 a.m.–10:30 a.m., organized by **Earl D. Fife**, Calvin College, and **Lawrence S. Husch**, University of Tennessee, Knoxville. Many mathematics courses at colleges and universities have a World Wide Web component. In addition, many faculty are encouraged and enticed to develop completely on line courses. The problems with assessment in Web-based mathematics courses

involve those encountered in all disciplines as well as difficulties unique to mathematics. These include the rendering of mathematical notation, how students enter mathematical notation, the determination of whether an answer is correct, etc. The panelists invited for this session will discuss some of these problems, their solutions and the results. There will be ample time for questions and interchange with the panelists. The panelists include **John Orr**, University of Oklahoma; **Gerardo A. Mendoza**, Temple University; and **Robby Robson**, Oregon State University. The session is sponsored by the MAA Committee on Computers in Mathematics Education (CCIME).

CBMS Report on the Mathematics Education of Teachers, Wednesday, 9:00 a.m.–10:20 a.m., organized by **Ronald C. Rosier**, Conference Board of the Mathematical Sciences (CBMS). CBMS recently published a report on the Mathematics Education of Teachers which encourages mathematical sciences departments in U.S. colleges and universities to make teacher education a more central part of their mission. The report calls for a rethinking of the mathematical education of teachers and offers principles to assist departments in this process, along with specific suggestions about teaching courses in the foundations of school mathematics. Panelists will discuss the recommendations of the report and possible next steps. Panelists include **W. James Lewis**, University of Nebraska; **Alan C. Tucker**, SUNY at Stony Brook; **Roger E. Howe**, Yale University; and **Carole B. Lacampagne**, U.S. Department of Education.

Redefining "College Algebra" Courses, Wednesday, 2:15 p.m.–3:45 p.m., organized by **Sheldon P. Gordon**, SUNY at Farmingdale. The MAA recently launched a major initiative to redefine what is meant by courses in college algebra. In this session, the panelists will discuss various aspects of this initiative, including the background and reasons for the initiative, the status of those courses that are identified as college algebra, the different populations of students who take these courses and for what reasons, some new visions for college algebra courses, and some of the problems as well as their solutions when a department moves to implement alternatives to traditional college algebra courses. Panelists include **Thomas A. Berger**, Colby College; **Donald B. Small**, U.S. Military Academy; **Arlene Kleinstein**, SUNY at Farmingdale; **Alexander H. Fluellen**, Clark Atlanta University; and **Bruce C. Crauder**, Oklahoma State University. The session is jointly sponsored by the MAA Task Force on College Algebra (Committee on the Undergraduate Program in Mathematics), CRAFTY (Calculus Reform At the First Two Years), Committee on Two Year Colleges, Committee on Service Courses, and the Committee on Quantitative Literacy.

Increasing Minority Representation in Mathematics Through GAANN, Wednesday, 2:15 p.m.–3:45 p.m., organized by **Lawrence S. Husch**, University of Tennessee; **Robert C. Rogers**, Virginia Polytechnic Institute and State University, and **Krishan M. Agrawal**, Virginia State University. Various departments in the country are receiving financial support to increase underrepresented groups in mathematics through the Graduate Assistance in Areas of National Need (GAANN) Program funded by the USDOE. The

panel members will describe their programs and will also discuss ways they are trying to increase minority representation in the field of mathematics. Audience participation will be solicited. Panelists include **Robert F. Olin**, Virginia Polytechnic Institute and State University; **Robert C. Rogers**; **Ping Zhang**, Western Michigan University; **Timothy L. Lance**, SUNY at Albany; **Krishan M. Agrawal**; **Alan C. Tucker**, SUNY at Stony Brook; **Alexandra Kurepa**, North Carolina A&T State University; and **David C. Manderscheid**, University of Iowa, Iowa City. The panel is sponsored jointly by the Committee on Minority Participation in Mathematics. There will be a poster presentation by various students exhibiting work in their respective programs, Wednesday, 5:15 p.m.–7:15 p.m.

YMN Project NExT Panel on Keeping Active in Research, Wednesday, 4:00 p.m.–5:30 p.m. organized by **J. Lynn Miller**, Western Kentucky University, and **Sharon M. Frechette**, Wellesley College. Many young mathematicians, both in academia and industry, struggle to make a place for continued research activity in their lives during the first few years out of graduate school. Those lucky enough to have a position at a large, heavily research oriented university or company have a lot of support in this endeavor from their immediate colleagues. However, if their career path leads to a school or company with different priorities, it can be much harder to stay active and interested in research and scholarly activity. Panelists will share their advice and experiences in balancing research requirements and desires with the professional (and personal) issues that confront us at the beginning of our careers. They will represent a broad cross section of the profession, including young faculty at private and public institutions (of various sizes), and mathematicians in geographically isolated locations, and those in companies with greater emphasis on involvement in management and other nonresearch oriented activities. Cosponsored by the MAA and the Young Mathematicians Network.

The British Open University: 30 Years On, Wednesday, 4:00 p.m.–6:00 p.m., organized by **Robin J. Wilson** and **John Fauvel**, British Open University. The Open University presented its first distance-learning courses in 1971, with a student population of 16,000 and a single mathematics course. It now has a student population of 160,000 (25,000 outside the UK) and a wide range of mathematics and computing courses from pre-calculus up to MSc courses. In this talk we summarize the expansion of mathematics at the Open University over the past 30 years, illustrate some of the multi-media teaching methods (BBC television programs, audiovision, software, etc.) that we use in our mathematics courses, and describe future plans in the Internet.

The Job Market, Wednesday, 4:00 p.m.–6:00 p.m., organized by **Thomas W. Rishel**, MAA. We will discuss all aspects of the job market, including how to write résumés and cover letters, what goes on at the Employment Center, and how it feels to actually have an academic position. We will also consider jobs outside academia, and we will finish with a chair's view of the hiring process. Panelists include **Debra L. Boutin**, Hamilton College; **Richard J. Cleary**, Cornell University; **Dennis M. Luciano**, Western New England College; **Carla Martin**, Cornell University; and

Thomas W. Rishel. The panel is sponsored by the Joint Committee on Employment Opportunities.

GAANN Poster Session on Sharing of Results by Future Mathematicians from Underrepresented Areas, Wednesday, 5:15 p.m.–7:15 p.m., organized by **Robert F. Olin**, Virginia Polytechnic Institute and State University. Several mathematics departments are receiving GAANN (Graduate Assistance in areas of National Need) funds from the U.S. Department of Education to increase minority representation in the area. This poster session will share the results of some of the participants in these programs.

Eine Kleine (Mathematische) Nachtmusik, Wednesday, 6:30 p.m.–8:00 p.m., organized by **Erich Neuwirth**, University of Vienna. The mathematical principles of musical tuning systems will be demonstrated, beginning with simple frequency ratios for musical interval known to the Greeks. Pythagorean, Mean Tone, and Well Tempered scales will be constructed with accompanying melodies and chords on the piano. A few different pieces will be performed by well known composers to show the connection between the mathematical and physical aspects of the problem. This will also demonstrate how much the musical expression of a piece of music changes when played in different tunings.

Faculty Isolated by Discipline, Thursday, 9:00 a.m.–10:30 a.m., organized by **John D. Fulton**, Virginia Polytechnic Institute and State University. A faculty member is isolated by discipline if s/he is the only faculty member with expertise in that discipline within a department. More than one faculty member could be isolated by discipline if they are nontenured and are the only faculty members with expertise in that discipline within a department. The panelists will focus on differences in what faculty members do when they have expertise in different mathematical sciences disciplines, on the special issues and experiences of faculty isolated by discipline, and on what they have done and what should be done to improve the working conditions of such faculty. The panelists include **Donald L. Bentley**, Pomona College; **John B. Fink**, Kalamazoo College; **Annie Selden**, Tennessee Technological University; **Henry M. Walker**, Grinnell College; and **Bernard L. Madison**, University of Arkansas, who will act as moderator. The panel is sponsored by the MAA Committee on the Profession, the Association for Research in Undergraduate Mathematics Education SIGMAA, and the ASA-MAA Committee on Statistics.

How To Attract More Students Into Advanced Mathematics Classes, Thursday, 9:00 a.m.–10:30 a.m., organized by **T. Christine Stevens**, St. Louis University; **Joseph A. Galian**, University of Minnesota, Duluth; and **Aparna W. Higgins**, University of Dayton. Despite extraordinary job opportunities and starting salaries for college graduates with advanced mathematical training, the number of students taking advanced mathematics courses has dramatically declined over the past ten years. The members of this panel are from departments that have been able to sustain large enrollments in advanced mathematics courses as well as a flourishing major in mathematics. They will describe what their faculty and their departments do to achieve this success. Panelists include **Mary D. Shepherd**,

SUNY-College at Potsdam; **Paul Zorn**, St. Olaf College; and **Kirby A. Baker**, University of California at Los Angeles. The session is sponsored by MAA's Project NEXT.

Doctoral Programs in Mathematics Education, Thursday, 9:00 a.m.–10:30 a.m., organized by **Robert E. Reys**, University of Missouri, Columbia. This session reports results from a recent national conference on doctoral programs in mathematics education and builds on that discussion. The nature and evolution of doctoral programs in mathematics education will be highlighted. Results from a survey of doctoral programs and information from recent graduates with doctorates in mathematics education will be reported. Discussion of core areas, such as mathematics content, and the role mathematics departments assume in the preparation of doctorates in mathematics education will be discussed. Panelists include **Joan Ferrini-Mundy**, Michigan State University; **James T. Fey**, University of Maryland, College Park; **Robert Glasgow**, Southwest Baptist University; and **Jeremy Kilpatrick**, University of Georgia.

College and University Quantitative Literacy Programs Across the Nation Poster Session, Thursday, 9:00 a.m.–11:00 a.m., organized by **John G. Harvey**, University of Wisconsin. Participants in this poster session will be faculty whose institutions have or are establishing quantitative literacy (QL) programs. The participants will share with the audience at this poster session the ways in which they have developed or are developing their programs, including the courses that have been developed, the students who are required or expected to participate in them, the texts and locally developed materials that are used, and the pitfalls encountered in developing the program. This session will give those attending an opportunity to (a) discuss programs and (b) exchange ideas and ways of instituting and maintaining these programs. Send proposals by December 10, 2000, to John G. Harvey, Department of Mathematics, University of Wisconsin, 480 Lincoln Drive, Madison, Wisconsin 53705 1388, jgharvey@facstaff.wisc.edu. The session is sponsored by the Subcommittee on Quantitative Literacy.

Growing an Oak Tree from an Acorn: Extending a New Program from a Few Innovators to the Whole Department, Thursday, 10:45 a.m.–12:15 p.m., organized by **Bonnie Gold**, Monmouth University, and **Richard Jardin**, Keene State College. Many teaching innovations are tried, and quite a few appear to be successes at first; however, unless others in the department are persuaded of the value of the innovation, the effect is generally temporary. This panel will give examples of places where more systematic change occurred and what was involved in causing this wider change. Panelists include **Morton Brown**, University of Michigan, Ann Arbor; **Jim Lewis**, University of Nebraska; **Bernard L. Madison**, University of Arkansas; and **David C. Arney**, U.S. Military Academy. The panel is sponsored by the MAA Committee on the Teaching of Undergraduate Mathematics.

Beyond the Writing of Principles and Standards for School Mathematics, Thursday, 10:45 a.m.–12:15 p.m., organized by **Gary Martin**, National Council of Teachers of Mathematics. The release of the *Principles and Standards*

for *School Mathematics* marked only a milestone in the continuing work to improve mathematics education for all students. NCTM's efforts of dissemination, implementation, and research should involve continued discussion with the broader mathematical community. The Association Review Groups (ARGs) played a vital role in helping the writers conceptualize the document. Should the ARGs be continued or reconstituted? Are there other, more effective ways to work together? What would be the purpose of the continued collaboration? The session will provide an update of NCTM's plans and an open discussion of the role of ARGs. Panelists include **Lee V. Stiff**, North Carolina State University; **Glenda Lappan**, Michigan State University; **Mary Lindquist**, Columbus State University; **Gary Martin**; and **John A. Thorpe**, NCTM.

Funding Opportunities in the NSF Division of Undergraduate Education, Thursday, 10:45 a.m.-12:15 p.m., organized by NSF. **James H. Lightbourne**, **Harriet G. Taylor**, **Elizabeth J. Teles**, and **Lee L. Zia**, NSF Division of Undergraduate Education, will describe the various programs and funding opportunities for undergraduate education projects. A question and answer period will follow.

Curriculum Foundations Project I: Reports from the Client Discipline Workshops, Thursday, 1:00 p.m.-2:30 p.m., organized by **William H. Barker**, Bowdoin College; **Jack Bookman**, Duke University; and **Susanna S. Epp**, DePaul University. CRAFTY organized a series of workshops, each focused on a particular client discipline, where mathematicians met with representatives from the discipline to discuss what mathematical experiences they wanted their students to have during the first two years of college. In this panel a participant from each of the workshops will summarize the discussions by addressing three questions: (1) What underlying philosophical concerns of the client discipline were expressed that would affect the nature of students' mathematical preparation? For example, what role should technology play in their mathematical education, and what are the relative emphases that should be placed on developing computational skill, problem solving ability, and deductive reasoning? (2) What are the critical mathematical ideas students in the discipline need to learn? (3) Were there issues about which the participants in the workshop were not able to reach consensus, and, if so, what were they? A representative (either a mathematician or a member of the client discipline) will report on each of the following curriculum foundation workshops: Physics, Computer Sciences, Biological Sciences, Quantitative Social Sciences, Engineering, and Mathematics Education.

Mathematics in Industry, Thursday, 1:00 p.m.-2:30 p.m., organized by **Philip E. Gustafson**, Mesa State College. This panel will provide a forum for the mathematics community to better understand how mathematics is conducted outside academia. Panelists will share typical workday experiences in industry and how they use mathematics on the job. This will be especially informative for mathematicians interested in learning more about industry, how to better understand and interact with mathematicians in industry, and how to provide training for students interested in working in industry. Panelists include **Michael G. Monticino** (moderator), University of North Texas; **Tony**

Cabal, Eastman Kodak Company; **Tami Carpenter**, Telcordia Technologies; **James C. Cavendish**, General Motors Corporation; **Alan Lewis**, Envision Financial Systems; **Laura Mather**, La Jolla Research Laboratories; and **Michael E. Moody**, Harvey Mudd College. The session is sponsored by the MAA Committee on Industrial and Government Mathematicians.

How to Facilitate Change?, Thursday, 1:00 p.m.-2:30 p.m., organized by **Donald B. Small**, U.S. Military Academy. Our society is changing at an increasing rate. Globalization and the information age, developments in learning theory, and changing needs of partner disciplines are challenging mathematics departments to reform curriculums. Although there are many faculty involved in developing innovative curriculums, moving these beyond a few experimental sections is a major hurdle for implementing change. This panel will discuss the need for creating an environment conducive to change and offer suggestions for encouraging and implementing change. Panelists include **David C. Arney**, U.S. Military Academy; **Jim Lewis**, University of Nebraska; **Scott Hunt**, Champion Paper Company; and **Scott Snook**, Harvard Business School and U.S. Military Academy. The panel will be moderated by **Kathleen Snook**, U.S. Military Academy.

Project NExT and Young Mathematician's Network Poster Session, Thursday, 2:00 p.m.-4:00 p.m., organized by **Kenneth A. Ross**, University of Oregon, and **Kevin E. Charlwood**, Washburn University. The session will include exhibits from thirty or so new or recent Ph.D.'s in the mathematical sciences, or from those still pursuing graduate study. Applications should be submitted to Ken Ross, ross@math.uoregon.edu, and Kevin Charlwood, zzchar1w@washburn.edu by December 10, 2000.

Statistics and Mathematical Modeling: Lively Applications for the Classroom, Thursday, 2:45 p.m.-4:15 p.m., organized by **G. Elton Graves**, Rose-Hulman Institute of Technology; **Francis E. Su**, Harvey Mudd College; and **Catherine M. Murphy**, Purdue University-Calumet. There will be two panelists: one to address statistics, the other mathematical modeling. Each will present recommendations for content and pedagogical strategies, lessons learned from their own teaching, and resources for faculty designing/teaching such courses. Organizers will follow-up with prepared questions. A question-and-answer session will complete the panel. Panelists include **Ami Radunskaya**, Pomona College, and **Allan J. Rossman**, Dickinson College.

New Directions in Moore Method Teaching, Thursday, 2:45 p.m.-4:15 p.m., organized by **James P. Ochoa**, Hardin-Simmons University, and **W. Ted Mahavier**, Nicholls State University. This will be a panel session about new directions in the use of the Moore method. Panelists will address ways they have adapted the Moore method in undergraduate mathematics education. Innovations such as textbooks inspired by the Moore method, cooperative learning in calculus courses, Web-based courses, and distance learning will be discussed. This session will be a sequel to the MAA panel session "Discovery-based teaching of undergraduate mathematics courses" at the 1999 Joint Mathematics Meeting, which featured panelists who are familiar

with the traditional Moore method. Panelists include **Carol Jean Browning**, Drury University; **Charles A. Coppin**, University of Dallas; **Dale Daniel**, Lamar University; **Joseph W. Eyles**, University of the Incarnate Word; and **Carol S. Schumacher**, Kenyon College.

The Mathematics of Lewis Carroll, Thursday, 7:00 p.m.–8:15 p.m., organized by **Robin J. Wilson**, The British Open University. This dramatic presentation by Robin Wilson and friends will contain episodes from the life of Lewis Carroll, with particular reference to his mathematics (both serious and otherwise) gleaned from his texts, mathematical puzzles, the “Alice” books, and University pamphlets. In particular, material relating to his views on algebra, logic, geometry, and his attitudes to teaching will be presented.

Curriculum Foundations Project II: Implications for the Mathematics Community, Friday, 9:00 a.m.–10:30 a.m., organized by **William H. Barker** Bowdoin College, **Jack Bookman**, Duke University, **Susanna S. Epp**, DePaul University. In the panel Curriculum Foundations Project I, reports were made by attendees of the Curriculum Foundations Project client discipline workshops. In this panel, each panelist will analyze and synthesize the various views expressed by the representatives of the client disciplines and propose a curricular outline for the first two years of college mathematics. Panelists will address such issues as (1) When is it appropriate to offer multiple tracks for the same mathematical subject (e.g. business calculus)? (2) Should students in all client disciplines be exposed to some common core content, and, if so, what should it be? (3) Were any common philosophical concerns expressed by all the client disciplines, and, if so, what are the implications of these concerns for the mathematics curriculum? (4) Is there any content that should be de emphasized, and, if so, what is it?

Proposal Writing Workshops for NSF Projects in the Division of Undergraduate Education, Friday, 9:00 a.m.–10:30 a.m., organized by **James H. Lightbourne**, NSF. Staff from the NSF Division of Undergraduate Education (DUE), including **James H. Lightbourne**, **Harriet G. Taylor**, **Elizabeth J. Teles**, and **Lee L. Zia**, will lead a workshop on preparing proposals for DUE projects. Features of successful projects will be discussed and pending attendance a mock review of a proposal will be conducted. The session will conclude with a general question and answer period.

College Algebra Reform Poster Session, Friday, 9:00 a.m.–11:00 a.m., organized by **Donald B. Small**, U.S. Military Academy, and **Dorothy Hunter Huston** and **Kamalvand Huston**, Tillotson College. Interest in reforming college algebra has grown rapidly over the past three years. Several new courses have been developed based on data analysis, functions, and modeling with strong emphasis on use of technology, developing communication skills, and small group projects. Materials from these courses, from quantitative literacy courses, and from other related courses will be displayed. Submit proposals to Don Small, Department of Mathematical Sciences, U.S. Military Academy, West Point, NY 10996, don-small@usma.edu. Submission deadline is December 10, 2000.

LiveMath Maker—The Future of Mathematics on the Internet, Friday, 1:00 p.m.–2:30 p.m., organized by **Joan Bookbinder**, Theorist Interactive. Come learn to create with LiveMath Maker. LiveMath Maker is a revolutionary new computer algebra system (CAS) used to produce LiveMath “notebooks”. These symbolically correct notebooks may be shared with the world via the World Wide Web using the free LiveMath Plug-In. The math you create is LIVE, not static. Similar to a spreadsheet in the way a change in one value will ripple throughout the calculations, LiveMath allows you to perform algebraic, numerical, and graphical experimentation with its dynamic recalculation feature. The notebooks do not just “do the math” but can be set up to show the steps and procedures of mathematics. Change one value and the notebook updates to reflect the change. Post it to the Web and anyone with the free plug-in can interact with the notebook through a browser allowing exploration of key mathematical topics.

Evolving Interdisciplinary Core Curriculum, Friday, 1:00 p.m.–2:30 p.m., organized by **Donald B. Small**, U.S. Military Academy. Core programs (2–4 semesters) are challenged to address: (1) content preparation for downstream courses; (2) student growth needs; and (3) societal needs. Major changes occurred in core programs during the early 1990s. Other major changes are underway. The panelists will address the role of a core program and how it is evolving. Panelists include **Michael E. Moody**, Harvey Mudd College; **Joseph D. Myers**, U.S. Military Academy; **Richard Plumb**, SUNY at Binghamton; and **John L. Scharf**, Carroll College. The panel will be moderated by **Gary W. Krahn**, U.S. Military Academy.

Research in Undergraduate Mathematics Education (RUME): Field of Study, or a Figment of Our Imagination?, Friday, 1:00 p.m.–2:30 p.m., organized by **Joan Ferrini-Mundy**, Michigan State University. For the past several years the community of individuals in the mathematical professional societies with professional interest in questions of the teaching and learning of undergraduate mathematics education has grown and become more visible. Yet many mathematicians contend that there is no “field” of RUME. Panelists will present arguments about what constitutes an academic field of study; what are qualities of research and research communities generally, and in mathematics education; what standards of evidence and reporting are typical in educational research; what challenges do “RUMers” face within the mathematical community. Panelists will each use one or two research papers as central examples in framing their remarks. A list of the papers will be available from the organizer prior to the meeting.

A Report on the ASA Undergraduate Statistics Education Initiative (USEI) and Curriculum Guidelines, Friday, 1:00 p.m.–2:30 p.m., organized by **Dexter C. Whittinghill**, Rowan University, and **John P. Holcomb**, Youngstown State University. The mission of the workshop held in April 2000 was to develop curriculum guidelines for formal study of statistics by undergraduates. This consisted of program requirements for both formal degrees in statistics and recommendations for courses or tracks in statistical science in conjunction with a degree in another discipline. Toward these goals, the workshop participants discussed issues

such as prioritizing topics, requiring nonstatistics courses, and determining the number of theory and application courses, to name a few. The panel discussants will present the consensus that emerged from this workshop. Panelists include **G. Rex Bryce**, Brigham Young University; **Robert V. Hogg**, University of Iowa, Iowa City; and **Richard L. Scheaffer**, University of Florida.

Assimilation of Adjunct Faculty, Friday, 1:00 p.m.–2:30 p.m., organized by **Bettye Anne Case**, Florida State University; **Kevin E. Charlwood**, Washburn University; and **Stephen B. Rodi**, Austin Community College. This panel will discuss issues relevant to the departmental life and status of nontenure-accruing faculty (adjunct, part-time or temporary) who today handle an increasingly large share of mathematics department teaching. Successful orientation, supervision, and assimilation of these faculty often determine the effectiveness of a lower division mathematics program. The panel will be both pragmatic and reflective, dealing with nitty-gritty details of the routine daily functioning of such faculty as well as with their broader role in student advising, curriculum development, and departmental decisions and philosophy. The panel will be moderated by **Bettye Anne Case**, and includes **Kevin E. Charlwood**, **Stephen B. Rodi**, and **Scott Herriott**, Maharishi University of Management. The panel is sponsored by the Joint AMS-MAA Committee on Teaching Assistants and Part-Time Instructors.

SUMMA Panel Discussion, Friday, 1:00 p.m.–2:30 p.m., organized by **William A. Hawkins Jr.**, director of the SUMMA (Strengthening Underrepresented Minority Mathematics Achievement) program. Presentations will be given on intervention programs for minority precollege students and faculty. Panelists will be **John H. Harris**, Lemoine-Owen College; **Carlos G. Spaht**, Louisiana State University, Shreveport; and **Viji K. Sundar**, California State University Stanislaus. Ample time will be available for questions.

Mathematical Experiences for Students Outside the Classroom, Friday, 1:00 p.m.–3:20 p.m., organized by **Richard L. Poss**, St. Norbert College, and **Thomas E. Kelley**, Metropolitan State College of Denver. Mathematics “happens” outside the classroom and, in fact, many math majors are drawn to the subject through an event sponsored by a Student Chapter or Math Club. This session seeks presentations by academic, industrial, business, or student mathematicians. Descriptions of nonclassroom activities could include, but are not limited to, special lectures, workshops for students, Math Days, Math Fairs, research projects for students, Career Days, recreational mathematics, problem solving activities, and student consultants. Applications should be submitted to Rick Poss at possr1@mail.snc.edu by December 1, 2000. The application should include name, address, phone number, e-mail address, title of presentation, and a one page description of the activity. Presentation time is limited and there is no guarantee that all submissions can be accepted. Applicants will be notified by December 15, whether or not their proposal has been accepted. This session is sponsored by the MAA Committee on Student Chapters.

NSF Division of Undergraduate Education Projects in the Course Poster Session (Curriculum and Laboratory

Improvement Program), Friday, 1:00 p.m.–3:00 p.m., organized by **Jon W. Scott**, Montgomery College. NSF Principal Investigators (PIs) of NSF Division of Undergraduate Education (DUE) projects will present poster displays describing their projects and current progress and outcomes. PIs will be available to talk with interested parties about adapting and/or implementing project materials and approaches.

Presentations by Teaching Award Recipients, Friday, 3:30 p.m.–5:00 p.m.. Winners of the Awards for Distinguished College or University Teaching of Mathematics will give presentations on the secrets of their success.

MAA-YMN Panel on Balancing Career and Family, Friday, 5:00 p.m.–6:30 p.m., organized by **Heather Ames Lewis**, Nazareth College, and **John A. Kuchenbrod**, Emory and Henry College. The challenge that mathematicians face in maintaining both their academic and nonacademic lives will be addressed. Panelists will represent a wide variety of “families,” from significant others and families of two to those including older children.

Informal Session on Actuarial Education, Friday, 5:00 p.m.–7:00 p.m., organized by **James W. Daniel**, University of Texas. This informal session sponsored by the Actuarial Faculty Forum provides an opportunity for those involved in actuarial education, interested in it, or curious about it, to get together to discuss common concerns such as the major changes in the actuarial exam systems that will have just taken place.

Association for Research on Undergraduate Mathematics Education SIGMAA Reception and Business Meeting, Friday, 5:00 p.m.–7:00 p.m., organized by **Julie M. Clark**, Emory and Henry College. ARUME is a group formed for mathematics educators and professional mathematicians interested in research on undergraduate mathematics education. There will be a welcoming address, business meeting, election of officers, an invited address exemplifying research on undergraduate mathematics, followed by a reception.

Environmental Mathematics, Friday, 6:30 p.m.–8:00 p.m., organized by **Ben A. Fusaro**, Florida State University, and directed by **Lothar A. Dohse**, University of North Carolina at Asheville. This dramatic presentation will consist of three skits, acted by your colleagues. Humor will be used to carry the message that, unlike oversized lawns, gas guzzlers and developers, mathematics can be helpful in solving environmental problems. The session is sponsored by the Committee for Mathematics in the Environment.

SIGMAA on Statistics Education Business Meeting and Reception, Friday, 7:00 p.m.–9:00 p.m., organized by **Dexter C. Whittinghill**, Rowan University. This group will meet in order to discuss an agenda of topics related to the teaching of undergraduate statistics. There will be a welcoming address, business meeting, and election of officers, followed by a reception.

Writing and the Mathematics Classroom, Saturday, 9:00 a.m.–10:30 a.m., organized by **John E. Meier**, Lafayette College, and **Thomas W. Rishel**, MAA. Writing has emerged as a useful tool for teaching and learning mathematics. In this session, the panelists will add to the growing list of writing projects that have proven to be effective in the

teaching of mathematics. They will also address practical and theoretical concerns such as assignment design; evaluation of student responses; the effect of writing in the classroom; and how writing assignments impact student performance on traditional graded events, such as homework and exams. Panelists include **Annalissa Crannell**, Franklin and Marshall College; **Julian F. Fleron**, Westfield State College; **Philip R. Hotchkiss**, Westfield State College; **John E. Meier**; **Morris Orzech**, Queen's University; and **Thomas W. Rishel**.

The Pedagogical Potential of Computer Symbolic Algebra in the Teaching of Precalculus and Calculus, Saturday, 9:00 a.m.–10:30 a.m., organized by **Bernhard Kutzler**, University of Linz, and **Helmut Heugl**, Technical University of Vienna. A two-level framework for understanding, categorizing, and planning the use of technology in teaching and learning mathematics is presented. At the first level we distinguish between the two basic uses of “automation” and “compensation”. At the second level we discuss the four applications as pedagogical tools for “trivialization”, “experimentation”, “visualization”, and “concentration”. Based on this framework we develop the “scaffolding method” as a pedagogically justified sequence of using and not using technology to achieve a given teaching goal. The method is demonstrated with examples. The implication of technology to assessment is discussed.

Restructuring the Mathematics Bachelor Degree, Saturday, 9:00 a.m.–10:30 a.m., organized by **Lisa Townsley Kulich**, Benedictine University. The onset of the twenty-first century is an appropriate time for mathematics departments to evaluate and renew their undergraduate major. Adjustments in the mathematics major program may arise from external demands for mathematicians with industrial training, internal development of interdisciplinary studies, education or research emphases, or technological innovations. Panelists at this discussion, sponsored by CUPM, will expound on revisions of the mathematics major at their particular institution. The revisions are at various stages of completion, from initial grass-roots agents of change to implementation to long-term evaluation of the changes. The progress of the CUPM study of the major will also be presented. Panelists include **Patricia Rogers**, York University; **Richard A. Gillman**, Valparaiso University; **David C. Arney**, U.S. Military Academy; **Donald W. Vander Jagt**, Grand Valley State University; and **Thomas R. Berger**, Colby College and CUPM.

Professors for the Future Programs in Mathematics, Saturday, 1:00 p.m.–2:30 p.m., organized by **Thomas W. Rishel**, MAA. Professors for the Future Programs have proven to be highly successful in preparing graduate students for life in academe. In this panel, faculty and graduate students will describe the impact their programs have had on themselves and their current and future employers. Panelists include **Amy Cohen-Corwin**, Rutgers University; **Luise Charlotte Kappe**, Binghamton University; **Matthias Kawski**, Arizona State University; **Kathryn L. Nyman**, Cornell University; **Eileen T. Shugart**, Virginia Polytechnic Institute and State University; and **Virginia M. Warfield**, University of Washington. The session is sponsored by the Joint Committee on Professors for the Future.

Articulation: Is the Transition to College Mathematics As Smooth As We Think It Is?, Saturday, 1:00 p.m.–2:30 p.m., organized by **Sheldon P. Gordon**, SUNY at Farmingdale and **Bernard L. Madison**, University of Arkansas. The MAA has launched a major initiative on articulation in response to a call from the Secretary of Education to ease the mathematical transitions between high school and college, between two-year institutions and four-year colleges and universities, and between different colleges. The secondary curriculum has been changing dramatically in response to the NCTM Standards. College curricula have changed because of efforts to re-invigorate calculus and other courses. Placement tests are often still based on very traditional courses and learning experiences that growing numbers of students have not been through. This panel session will address all of these issues, including the role of the College Board, and what may emerge as a result of the MAA initiative and the efforts of the Task Force on Articulation. The panel will be moderated by **Linda Boyd**, Georgia Perimeter College. Panelists include **Bernard L. Madison**; **Lee Jones**, Executive Director of AP program at the College Board; **Susan L. Forman**, Bronx Community College; and **Daniel Kennedy**, Baylor School. The panel is sponsored by the MAA Task Force on Articulation.

Open Discussion on Reforming College Algebra, Saturday, 2:45 p.m.–4:15 p.m., organized by **Donald B. Small**, U.S. Military Academy. Interest in reforming college algebra has grown rapidly over the past three years. Several new courses have been developed based on data analysis, functions, and modeling with strong emphasis on use of technology, developing communication skills, and small group projects. Comments on these courses, on state legislative programs related to college algebra, on college algebra as a “life skills” course, and on the need for algebraic skills are among the topics that will be discussed. The session is open to everyone. Panelists include **Della D. Bell**, Texas Southern University, and **Sarah Bush**, Wiley College.

Mathematics and the Mathematical Sciences in 2010: What Should Graduates Know?, Saturday, 2:45 p.m.–4:15 p.m., organized by **Thomas R. Berger**, Colby College. The third millennium confronts us with the need to prepare our students for new challenges. Identifying these challenges will guide mathematics departments in setting, addressing, and meeting goals. A broad look at the undergraduate curriculum is particularly timely after over a decade of innovation and debate about content and pedagogy in specific courses. The MAA Committee on the Undergraduate Program in Mathematics (CUPM) just announced a series of papers about the undergraduate majors. Now the Committee is soliciting experiences and ideas from the profession. We invite you to participate in this discussion of the undergraduate majors.

Teaching to Attract Potential Teachers, Saturday, 3:45 p.m.–5:15 p.m., organized by **Mary Robinson**, University of New Mexico-Valencia Campus; **Janet P. Ray**, Seattle Central Community College; and **Gary L. Britton**, University of Wisconsin Washington County. There is a growing national awareness of the need to recruit and prepare mathematically capable students for the teaching profession at all levels. Faculty and institutions are considering a wide variety

of strategies to accomplish this goal, from developing new teacher preparation initiatives, to exploring how existing general education and elective mathematics courses can stimulate interest in mathematics teaching. Panelists will discuss programs that have been successful and ideas for the future. The panel, moderated by **Jay A. Malmstrom**, Oklahoma City Community College, includes **Joanne Peeples**, El Paso Community College; **Patricia Stone**, Tomball College; **Susan D. Parsons**, Cerritos College; and **Arnold M. Ostebee**, St. Olaf College. The session is sponsored by the MAA Committee on Two Year Colleges.

MAA Student Activities

Information on the special **Student Lecture** on Friday evening is included in the MAA Invited Address section.

Undergraduate Student Poster Session, Friday, 5:00 p.m.–7:30 p.m., organized by **Mario U. Martelli**, Claremont McKenna College. Send title and one-page abstract including authors' name, address, phone number, email and the name of the faculty advisor to Mario Martelli at mario_martelli@mckenna.edu, or Mathematics Department, Claremont McKenna College, Claremont, CA 91711 by December 10, 2000. Notification of acceptance will be emailed two weeks after the abstract has been received. Apply early! Space is limited. The session is reserved to undergraduates. First-year graduate students may submit posters about work done while undergraduates. Posters' content cannot be purely expository. The best posters will be awarded a monetary prize with funds provided by the MAA, AMS, and CUR. Tri-fold self-standing 48" x 36" tabletop posterboard will be provided. Additional material or equipment is the responsibility of each presenter.

Please see the listing under **Mathematical Experiences for Students Outside the Classroom**, on Friday, 1:00 p.m.–3:20 p.m., in the *Other MAA Sessions* section. Student submissions are invited.

Other student opportunities are included in the *Social Events* section.

MAA Short Course

Knots in Science, Monday and Tuesday, January 8 and 9, organized by **De Witt L. Sumners**, Florida State University.

Knot theory has recently evolved from an area in "pure" mathematics to include scientific applications in biology, chemistry, fluid mechanics, and physics. This development is not surprising when one realizes that knots are one-dimensional strings that explore the entanglement complexity possible in three-dimensional space. Many physical objects are string-like; macromolecules such as polyethylene and DNA exhibit knotting, and the DNA knots are diagnostic of cellular metabolic function. Vortices that form in fluid motion can be long string-like objects, and vortex entanglement has physical ramifications. This short course will introduce knots, and present introductions to many fascinating scientific applications for knots. Speakers and their talks include **Colin C. Adams**, Williams College, *Introduction to knots*; **Louis H. Kauffman**, University of Illinois at Chicago, *Knots in physics*; **Renzo L. Ricca**, University College, London, *Vortex and magnetic knots in*

fluid systems; **Jonathan Simon**, University of Iowa, Iowa City, *Physical knots*; **Andrzej Stasiak**, University of Lausanne, *Ideal knots*; **De Witt L. Sumners**, *Knots in DNA*; **Stuart G. Whittington**, Department of Chemistry, University of Toronto, *Knots in polymers*.

Please note that there is a separate registration fee for this Short Course. To register in advance, please use the Advance Registration/Housing form found at the back of this issue or <http://www.ams.org/cgi-bin/meetreg/meetings?meetnum=2025>. Advance registration fees are \$125/member; \$175/nonmember; and \$50/student, unemployed, emeritus. On-site registration fees are \$140/member; \$190/nonmember; and \$60/student, unemployed, emeritus.

Other MAA Events

Board of Governors, Tuesday, 8:30 a.m.–4:00 p.m.

Section Officers, Wednesday, 4:30 p.m.–6:30 p.m.

Business Meeting, Saturday, 11:10 a.m.–11:40 a.m.

See the listings for various receptions in the *Social Events* section.

Activities of Other Organizations

Several organizations or special groups are having receptions or other social events. Please see the *Social Events* section of this announcement for details.

Association for Symbolic Logic (ASL)

This two-day program on Friday and Saturday will include Invited Addresses and sessions of contributed papers.

Invited Addresses (days, time and titles to be announced):

Peter A. Cholak, Notre Dame University;

Tamara J. Hummel, Allegheny College;

Alexander S. Kechris, California Institute of Technology;

Paul Larson, University of Toronto;

Thomas W. Scanlon, University of California Berkeley; and

Lou P. van den Dries, University of Illinois, Urbana-Champaign.

Association for Women in Mathematics (AWM)

Twenty-Second Annual Emmy Noether Lecture, Thursday, 9:00 a.m.–9:50 a.m., **Sun-Yung Alice Chang**, Princeton University and University of California Los Angeles, *Nonlinear equations in conformal geometry*.

A dinner in honor of the lecturer will be held on Wednesday evening. See the *Social Events* section for details on how to participate.

AWM and K-8 Education: What Should We Do? Wednesday, 2:45 p.m.–4:05 p.m., organized by **Suzanne Lenhart**, University of Tennessee, Knoxville, and **Jean E. Taylor**, Rutgers University. Panelists include **Shirley Malcom**, American Association for the Advancement of Science; **Judith Roitman**, University of Kansas; **Erica D. Voolich**, Solomon Schechter Day School; **Virginia M. Warfield**, University of Washington; and one other to be announced.

At the conclusion of the panel discussion, AWM will recognize the Alice T. Schafer Prize winner, runner-up, and honorable mention honorees. Note that formal prize

winner announcements are made at the Joint Prize Session on Thursday afternoon (see the AWM inclusion in the *Joint Sessions* section at the beginning of this announcement.)

Business Meeting, Wednesday, 4:05 p.m.–4:25 p.m.

Workshop, Saturday, 8:30 a.m.–5:00 p.m. With funding from the Office of Naval Research and the National Science Foundation (pending final funding approval), AWM will conduct its workshop for women graduate students and women who have received the Ph.D. within the last five years.

Twenty women mathematicians have been selected in advance of this workshop to present their research. The selected graduate students will present posters, and the recent Ph.D.'s will give 20-minute talks. Travel funds are provided to the twenty selected presenters. The workshop will also include a panel discussion on issues of career development and a luncheon. Participants will have the opportunity to meet with other women mathematicians at all stages of their careers. All mathematicians (female and male) are invited to attend the entire program. Departments are urged to help graduate students and recent Ph.D.'s who do not receive funding to obtain some institutional support to attend the workshop and the associated meetings. The deadline for applications for presenting and funding has expired. Inquiries regarding future workshops may be made to AWM by telephone: 301-405-7892, by e-mail: awm@math.umd.edu, or visit <http://www.awm-math.org/>.

AWM seeks volunteers to lead discussion groups and to act as mentors for workshop participants. If you are interested in volunteering, please contact the AWM office.

Reception, Wednesday, 9:30 p.m.–11:00 p.m. See the listing in the *Social Events* section of this announcement.

National Association of Mathematicians (NAM) Granville-Brown Session of Presentations by Recent Doctoral Recipients in the Mathematical Sciences, Friday, 2:15 p.m.–5:00 p.m.

Cox-Talbot Address, Friday after the banquet.

Panel Discussion, Saturday, 9:00 a.m.–9:50 a.m.

Business Meeting, Saturday, 10:00 a.m.–10:50 a.m.

William W. S. Claytor Lecture, Saturday, 1:00 p.m.

See details about the banquet on Friday in the *Social Events* section.

National Science Foundation (NSF)

The NSF will be represented at a booth in the exhibit area. NSF staff members will be available to provide counsel and information on NSF programs of interest to mathematicians. The booth is open the same days and hours as the exhibits. Times that staff will be available will be posted at the booth.

Pi Mu Epsilon (PME)

Council Meeting, Friday, 8:00 a.m.–11:00 a.m.

Rocky Mountain Mathematics Consortium (RMMC) Board of Directors Meeting, Friday, 2:15 p.m.–4:10 p.m.

Young Mathematicians Network (YMN)

Concerns of Young Mathematicians: A Town Meeting, Wednesday, 7:15 p.m.–8:15 p.m., organized by **Kevin E. Charlwood**, Washburn University. This panel discussion will focus on the current primary concerns for young mathematicians, with emphasis on audience participation.

Also see details about the poster session (Thursday afternoon) and panel discussions (Wednesday and Friday afternoons) cosponsored by YMN under *Other MAA Sessions*.

Ancillary Conference

American Statistical Association (ASA): Course for statistics instructors at universities, junior colleges, and high schools! Mathematicians and others who teach courses in introductory statistics will be pleased to know that the course "Teaching Statistics with Active Learning" will again be offered on January 8 and 9 preceding the Joint Mathematics Meetings in New Orleans. Presenters for this two-day LearnSTAT course are **Beth L. Chance**, California Polytechnic State University, and **Allan J. Rossman**, Dickinson College. The course is designed for instructors from universities, colleges, junior colleges and high schools. It will actively involve participants with hands-on investigations that can be adopted for use with students. The course is of particular value to those who teach statistics but have little training in the discipline. Cost is \$225 for both days. Visit the LearnSTAT site at <http://www.amstat.org/education/learnstat.html> for complete course description, registration, and hotel information. Inquiries can be directed to learnstat@amstat.org.

Social Events

It is strongly recommended that for any event requiring a ticket, tickets should be purchased through advance registration. Only a very limited number of tickets, if any, will be available for sale on site. If you must cancel your participation in a ticketed event, you may request a 50% refund by returning your ticket(s) to the Mathematics Meetings Service Bureau (MMSB) by January 5. After that date no refunds can be made. Special meals are available at the banquet or luncheon upon advance request, but this must be indicated on the Advance Registration/Housing Form.

Student Hospitality Center, Wednesday–Friday, 9:00 a.m.–5:00 p.m., and Saturday, 9:00 a.m.–3:00 p.m., organized by **Richard Neal**, University of Oklahoma.

Graduate Student Reception, Wednesday, 5:00 p.m.–6:30 p.m. Mathematicians representing a wide range of disciplines will join interested graduate students at an informal reception. Complimentary food and beverages will be served. NOTE: This event is only for students who sign up on the Advance Registration/Housing (ARH) form.

Reception for First-Time Participants, Wednesday, 6:00 p.m.–7:00 p.m. The AMS and the MAA Committee on Membership are cosponsoring a social hour on Wednesday from 6:00 p.m. to 7:00 p.m. All participants (especially first-timers) are encouraged to come and meet some old-timers

and pick up a few tips on how to survive the environment of a large meeting. Refreshments will be served.

Mathematical Sciences Institutes Reception, Wednesday, 5:30 p.m.–7:30 p.m. CRM, DIMACS, the Fields Institute, IMA, IPAM, MSRI, and PIMS invite you to a reception where you can talk to their representatives, and learn about their current and future programs and activities (or reminisce about their past ones). The participating institutes are Centre de Recherches Mathématiques (Montréal), the Center for Discrete Mathematics and Theoretical Computer Science (New Jersey), the Fields Institute (Toronto), the Institute for Mathematics and Its Applications (Minneapolis), the Institute for Pure and Applied Mathematics at UCLA (Los Angeles), the Mathematical Sciences Research Institute (Berkeley), and the Pacific Institute for the Mathematical Sciences (Vancouver).

All participants are invited to a **dinner to honor AWM's Noether Lecturer** on Wednesday. A sign-up sheet for those interested will be located at the AWM table in the exhibit area and also at the AWM panel discussion.

AWM Reception: There is an open reception on Wednesday at 9:30 p.m. after the AMS Gibbs Lecture. This has been a popular, well-attended event in the past.

MAA Two-Year College Reception, Thursday, 5:45 p.m.–7:00 p.m., sponsored by Addison Wesley Longman.

MER Banquet: The Mathematicians and Education Reform (MER) Network welcomes all mathematicians who are interested in precollege, undergraduate, and/or graduate educational reform to attend the MER banquet on Thursday evening. This is an opportunity to make or renew contacts with other mathematicians who are involved in education projects and to engage in lively conversation about educational issues. The after-dinner discussion is an open forum for participants to voice their impressions, observations, and analyses of the current education scene. There will be a cash bar beginning at 6:30 p.m. Dinner will be served at 7:30 p.m. Tickets are \$46 each, including tax and gratuity.

Joint Pi Mu Epsilon and MAA Student Chapter Advisors' Breakfast, Friday, 7:00 a.m.–8:00 a.m.. Contact Richard Jarvinen, rdjarvinen@vax02.winona.msus.edu.

Purdue University Department of Mathematics Reception, Friday 5:00 p.m.–7:00 p.m. All alumni, friends, and staff are welcome.

NAM Banquet, Friday, 5:30 p.m. to 8:00 p.m. The National Association of Mathematicians will host a banquet on Friday evening. A cash bar reception will be held at 5:30 p.m. and dinner will be served at 6:00 p.m. Tickets are \$43 each, including tax and gratuity.

AMS Banquet: As a fitting culmination to the Meetings, the AMS banquet provides an excellent opportunity to socialize with fellow participants in a relaxed atmosphere. The participant who has been a member of the Society for the greatest number of years will be recognized and will receive a special award. The banquet will be held on Saturday with a cash bar reception at 6:30 p.m. and dinner at 7:30 p.m. Tickets are \$44, including tax and gratuity.

Other Events of Interest

AMS Information Booth: All Meetings participants are invited to visit the AMS Information Booth during the Meetings. Complimentary coffee and tea will be served. A special gift will be available for participants, compliments of the AMS. The membership manager of the Society will be at the booth to answer questions about membership.

Book Sales and Exhibits: All participants are encouraged to visit the book, education media, and software exhibits from noon to 5:30 p.m. on Wednesday, 9:30 a.m. to 5:30 p.m. on Thursday and Friday, and 9:00 a.m. to noon on Saturday. Books published by the AMS and MAA will be sold at discounted prices somewhat below the cost for the same books purchased by mail. These discounts will be available only to registered participants wearing the official Meetings badge. Most major credit cards will be accepted for book sale purchases at the Meetings. Also, AMS electronic products and e-MATH will be demonstrated. Participants visiting the exhibits will be asked to display their Meetings badge or acknowledgment of advance registration from the Mathematics Meetings Service Bureau in order to enter the exhibit area.

Mathematical Sciences Employment Center: Those wishing to participate in the Mathematical Sciences Employment Center should read carefully the important article about the Center beginning on page 1218 in this issue of the *Notices* or at <http://www.ams.org/emp-reg/>.

Registering in Advance and Hotel Accommodations

How to Register in Advance: The importance of advance registration cannot be overemphasized. Advance registration fees are considerably lower than the fees that will be charged for registration at the meeting. Participants registering by November 14 will receive their badges, programs, and tickets purchased in advance by mail approximately three weeks before the Meetings, unless they check the appropriate box to the contrary on the Advance Registration/Housing Form. Because of delays that occur in U.S. mail to Canada, it is strongly suggested that advance registrants from Canada choose to pick up their materials at the Meetings. Because of delays that occur in U.S. mail to overseas, materials are never mailed overseas. There will be a special Registration Assistance Desk at the Joint Meetings to assist individuals who either do not receive this mailing or who have a problem with their registration. Please note that a \$5 replacement fee will be charged for programs and badges that are mailed but not taken to New Orleans. Acknowledgments of registrations will be sent by e-mail to the e-mail addresses given on the Advance Registration/Housing Form. If you do not wish your registration acknowledged by e-mail, please mark the appropriate box on the form.

E-mail Advance Registration: This service is available for advance registration and housing arrangements by requesting the forms via e-mail from meetreg-request@ams.

org, or see http://www.ams.org/amsmtgs/2025_registration.html or http://www.ams.org/amsmtgs/2025_intro.html and look for "Registration". VISA, MasterCard, Discover, and American Express are the only methods of payment which can be accepted for e-mail advance registration, and charges to credit cards will be made in U.S. funds. Completed e-mail forms should be sent to meetreg-submit@ams.org. All advance registrants will receive acknowledgment of payment prior to the Meetings.

Internet Advance Registration: This service is available for advance registration and housing arrangements at http://www.ams.org/amsmtgs/2025_registration.html. VISA, MasterCard, Discover, and American Express are the only methods of payment which are accepted for Internet advance registration, and charges to credit cards will be made in U.S. funds. All Internet advance registrants will receive acknowledgment of payment upon submission of this form.

Cancellation Policy: Those who cancel their advance registration for the Meetings, MAA Minicourses, or Short Courses by January 5 (the deadline for refunds for banquet tickets is December 29) will receive a 50% refund of fees paid. No refunds will be issued after this date.

Joint Mathematics Meetings Registration Fees

	by Dec. 15	at meeting
Member of AMS, ASL, Canadian Mathematical Society, MAA	\$175	\$228
Temporarily Employed	135	153
Emeritus Member of AMS, MAA; Graduate Student; Unemployed; Librarian; High School Teacher; Developing Countries Special Rate	35	45
Undergraduate Student	20	26
Nonmember	271	353
High School Student	2	5
One Day Member of AMS, CMS, MAA	n/a	125
One Day Nonmember	n/a	194
Nonmathematician Guest	5	5
Employment Center		
Employer (first table)	\$200	\$250
Employer (each additional table)	50	75
Applicants (all services)	40	75
Applicants (<i>Winter List</i> & message center only)	20	20
Employer Posting Fee	50	N/A
AMS Short Course		
Student/Unemployed/Emeritus	\$35	\$45
All other participants	80	95
MAA Minicourses		
Minicourses #7-14	\$55	\$55*
Minicourses #1-6	85	85*
*if space is available		
MAA Short Course		
MAA Member	\$125	\$140
Nonmember	175	190

Student/Unemployed/Emeritus 50 60

Full-Time Students: Those currently working toward a degree or diploma. Students are asked to determine whether their status can be described as graduate (working toward a degree beyond the bachelor's), undergraduate (working toward a bachelor's degree), or high school (working toward a high school diploma) and to mark the Advance Registration/Housing Form accordingly.

Emeritus: Persons who qualify for emeritus membership in either the Society or the Association. The emeritus status refers to any person who has been a member of the AMS or MAA for twenty years or more and who retired because of age or long-term disability from his or her latest position.

Librarian: Any librarian who is not a professional mathematician.

Unemployed: Any person currently unemployed, actively seeking employment, and not a student. It is not intended to include any person who has voluntarily resigned or retired from his or her latest position.

Developing Country Participant: Any person employed in developing countries where salary levels are radically non-commensurate with those in the U.S.

Temporarily Employed: Any person currently employed but who will become unemployed by June 1, 2001, and who is actively seeking employment.

Nonmathematician Guest: Any family member or friend who is not a mathematician and who is accompanied by a participant of the Meetings. These official guests will receive a badge and may attend all sessions and the exhibits.

Participants who are not members of the AMS and/or the MAA will receive mailings after the Meetings are over with a special membership offer from AMS and MAA.

Advance registration and on-site registration fees only partially cover the expenses of holding meetings. All mathematicians who wish to attend sessions are expected to register and should be prepared to show their badges if so requested. Badges are required to enter the exhibit area, to obtain discounts at the AMS and MAA Book Sales, and to cash a check with the Joint Meetings cashier. If a registrant should arrive too late in the day to pick up his/her badge, he/she may show the acknowledgment of advance registration received from the MMSB as proof of registration.

Advance registration forms accompanied by insufficient payment will either be returned, thereby delaying the processing of any housing request, or a \$5 charge will be assessed if an invoice must be prepared to collect the delinquent amount. Overpayments of less than \$5 will not be refunded.

For each invalid check or credit card transaction that results in an insufficient payment for registration or housing, a \$5 charge will be assessed. Participants should check with their tax preparers for applicable deductions for education expenses as they pertain to these Meetings.

If you wish to be included in a **list of individuals sorted by mathematical interest**, please provide the one mathematical subject classification number of your major area of interest on the Advance Registration/Housing Form. (A list of these numbers is available by sending an empty

e-mail message to abs-submit@ams.org; include the number 962 as the subject of the message.) Copies of this list will be available for your perusal in the Networking Center.

If you do not wish to be included in any mailing list used for promotional purposes, please indicate this in the appropriate box on the Advance Registration/Housing Form.

Advance Registration Deadlines

There are three separate advance registration deadlines, each with its own advantages and benefits.

EARLY advance registration

(room lottery, inclusion in the *Winter*

Lists for the Employment Center) **November 1**

ORDINARY advance registration

(hotel reservations, materials mailed)

November 14

FINAL advance registration

(advance registration, Short Courses, Employment Center, MAA Minicourses, Banquets)

December 15

Early Advance Registration: Those who register by the **early** deadline of November 1 will be included in a random drawing to select winners of complimentary hotel rooms in New Orleans. Multiple occupancy is permissible. The location of rooms to be used in this lottery will be based on the number of complimentary rooms available in the various hotels. Therefore, the free room may not necessarily be in the winner's first-choice hotel. The winners will be notified by mail prior to December 25. So register early! (See the list of the winners in Washington, D.C. on the hotel page.) Also, applicant and employer forms must be received by November 1 in order to be reproduced in the *Winter Lists* for the Employment Center.

Ordinary Advance Registration: Those who register after November 1 and by the **ordinary** deadline of November 14 may use the housing services offered by the MMSB but are not eligible for the room lottery. You may also elect to receive your badge and program by mail in advance of the meetings.

Final Advance Registration: Those who register after November 14 and by the **final** deadline of December 15 must pick up their badges, programs, and any tickets for social events at the meetings. Unfortunately, it is not possible to provide **final** advance registrants with housing. Please note that the **December 15 deadline is firm**; any forms received after that date will be returned and full refunds issued. Please come to the Registration Desk in the Marriott Hotel to register on site.

Hotel Reservations

Participants should be aware that the AMS and MAA only contract with facilities who are working toward being in compliance with the public accommodations requirements of the ADA.

Participants requiring hotel reservations should read the instructions on the following hotel pages. Participants who did not reserve a room during advance registration and would like to obtain a room at one of the hotels listed on

the following pages should call the hotels directly after December 25. However, after that date the MMSB can no longer guarantee availability of rooms or special convention rates. Participants should be aware that most hotels are starting to charge a penalty fee to guests for departure changes made after guests have checked into their rooms. Participants should inquire about this at check-in and make their final plans accordingly.

Participants should also be aware that it is general hotel practice in most cities to hold a nonguaranteed reservation until 6:00 p.m. only. When one guarantees a reservation by paying a deposit or submitting a credit card number as a guarantee in advance, however, the hotel usually will honor this reservation up until checkout time the following day. If the individual holding the reservation has not checked in by that time, the room is then released for sale, and the hotel retains the deposit or applies one night's room charge to the credit card number submitted.

If you hold a guaranteed reservation at a hotel but are informed upon arrival that there is no room for you, there are certain things you can request the hotel do. First, they should provide for a room at another hotel in town for that evening at no charge. (You already paid for the first night when you made your deposit.) They should pay for taxi fares to the other hotel that evening and back to the Meetings the following morning. They should also pay for one telephone toll call so that you can let people know you are not at the hotel you expected. They should make every effort to find a room for you in their hotel the following day and, if successful, pay your taxi fares to and from the second hotel so that you can pick up your baggage and bring it to the first hotel. Not all hotels in all cities follow this practice, so your request for these services may bring mixed results or none at all.

Miscellaneous Information

Audio-Visual Equipment: Standard equipment in all session rooms is one overhead projector and screen. (Invited 50-minute speakers are automatically provided with two overhead projectors.) Blackboards are not available. Organizers of sessions that by their nature demand additional equipment (e.g., VCR and monitor or projection panel) and where the majority of speakers in the session require this equipment should contact the audio-visual coordinator for the meetings at the AMS office in Providence at 401-455-4140 or by e-mail at wsd@ams.org, to obtain the necessary approvals. Individual speakers must consult with the session organizer(s) if additional equipment or services are needed. If your session has no organizer, please contact the audio-visual coordinator directly. All requests should be received by November 4.

Equipment requests made at the Meetings most likely will not be granted because of budgetary restrictions. Unfortunately no audio-visual equipment can be provided for committee meetings or other meetings or gatherings not on the scientific program.

Child Care: The Marriott and Sheraton hotels will provide recommendations for in-room child care for guests

How to Obtain Hotel Accommodations

<p>Room Lottery: (See the <i>How to Register in Advance</i> section to learn how to qualify for this year's lottery.) Here are last year's winners:</p> <p>Pat Baggett, Stephen Berman, Una Bray, Maya Chhetri, Alberto Corso, Jeffrey Feuer, Larry Gerstein, Carlos Guillen, Sara Hakim, Evans Harrell, Apama Higgins, Jan Hogendijk, John Koker, Blaire Madore, Karen Parshall, Bob Powers, Catherine Roberts, Joseph Rosenblatt, Natasha Speer, Benjamin Stein, Bruce Stewart, Dan Vellman, Jonathan Wiens</p>	<p>General Instructions: Participants must register in advance in order to obtain hotel accommodations through the Mathematics Meetings Service Bureau (MMSB). Special meeting rates at the hotels listed below can only be obtained by making reservations through the MMSB. To make a reservation, please submit a completed housing section of the Advance Registration/Housing (ARH) Form with guarantee by November 14. Sorry, reservations cannot be taken by phone. Reservations mistakenly taken by hotels directly may be subject to an increased rate. Hotels will only accept reservations directly after December 25; rooms and rates based on availability. Participants interested in suites are urged to first call the hotels directly for details on configurations, prices, etc. and then submitting their request(s) to the MMSB.</p>
--	--

\$ Rates:

- subject to 12% sales tax plus city occupancy tax; city (\$) tax varies based on hotel; **city tax included in rates listed below**
- only certified students or unemployed mathematicians qualify for student rates
- see ARH Form for detailed rate structure of each property

\$ Room Payments/Cancellations:

- all major credit cards accepted
- personal checks with personal ID and/or credit card backup accepted at all properties
- 72-hour cancellation policy for all hotels except Marriott (48 hours) and Sheraton (48 hours)

\$ Guarantee Requirements:

- one night deposit by check, or
- credit card: VISA, MC, AMEX (cards may be charged one night deposit)

Ⓜ Hotel Information:

- children free, where appropriate, in existing beds only
- limited availability of cribs, free of charge
- check-in: 3:00 p.m./check-out: noon – Marriott, Sheraton, Le Meridien, La Quinta
- check-in: 4:00 p.m./check-out: noon – Queen & Crescent, Royal St. Charles
- windows do not open in rooms unless otherwise indicated



Special Services:

- all hotels are working toward being in compliance with the Americans with Disabilities Act (ADA)
- special needs should be clearly indicated on the ARH Form
- nonsmoking rooms available at all properties
- handicapped-accessible rooms available at all properties



Deadlines:

- room lottery qualification: **November 1**
- reservations through MMSB: **November 14**
- changes/cancellations through MMSB: **December 13**
- rooms and convention rates after **December 25** - based on availability only

<p>New Orleans Marriott (Across street from Sheraton)</p> <p>555 Canal Street New Orleans, LA 70130-2300 (504) 581-1000 single-\$116, double-\$121 student single/double-\$108</p> <p>restaurants; bars; heated outdoor pool; fitness center; business center; gift shop; parking - \$17.50 (valet only), in all rooms (Quarter Tower or River Tower); coffee maker, hair dryer, iron/ironing board, desk, dataport, 24-hour room service; children under 18 years free</p>	<p>Sheraton New Orleans (co-headquarters) (Across street from Marriott)</p> <p>500 Canal Street New Orleans, LA 70130 (504) 525-2500 main house: single-\$116; double-\$124 club level: single-\$157; double-\$169 student single/double - \$110</p> <p>restaurant; bars; heated outdoor pool; fitness center; business center; gift shop; parking - \$25 car, \$28 van or truck (valet only); in all rooms (City View or River View); hair dryer, coffee maker, iron/ironing board, desk, dataport, safe; children under 18 years free</p>	<p>Le Meridien (.5 block to Marriott and Sheraton)</p> <p>614 Canal Street New Orleans, LA 70130 (504) 525-6500 superior: single/double - \$117 deluxe: single/double - \$137</p> <p>French-European hotel; overlooks French Quarter; restaurants; jazz club; gift shop; business center; health club; heated outdoor pool; parking-\$18 (valet only); in all rooms: king bed or two (European) twin beds, coffee maker, mini bar, two phone lines, iron/ironing board, hair dryer, desk; children under 12 years free</p>	<p>Queen & Crescent (2.5 blocks to Marriott and Sheraton)</p> <p>344 Camp Street New Orleans, LA 70130 (504) 679-6306 single/double - \$106 student single/double - \$96 (limited)</p> <p>complimentary continental breakfast; no restaurant; fitness center; parking - \$15 valet, \$10 self (no in/out); in all rooms: deluxe with European decor, hair dryer, coffee maker, iron/ironing board, dataport, safe, robe, air mattress (limited amount) provided upon request at no charge; children under 18 years free</p>	<p>Royal St. Charles (2 blocks to Marriott and Sheraton)</p> <p>135 St. Charles Avenue New Orleans, LA 70130 (504) 587-3700 single/double - \$106 student single/double - \$96 (limited)</p> <p>complimentary continental breakfast; no restaurant; fitness center; parking - \$15 valet, \$10 self (no in/out); in all rooms: deluxe with European decor, hair dryer, coffee maker, iron/ironing board, dataport, safe, robe, air mattress (limited amount) provided upon request at no charge; children under 18 years free</p>	<p>La Quinta Inn & Suites (2 blocks to Marriott and Sheraton)</p> <p>401 Camp Street New Orleans, LA 70130 (504) 598-9977 single - \$100, double - \$110</p> <p>complimentary continental breakfast; no restaurant; laundry room; fitness room; outdoor pool; parking-\$16 (valet); all rooms are suites; in all rooms: coffee maker, iron/ironing board, dataport, microwave, refrigerator, (no double-double rooms), desk; children under 12 years free</p>
--	--	---	--	--	--

Attention Students!

As an alternative housing choice, the following student hostel is located in New Orleans: **Hostelling International Marquette House** (located 22 blocks from **Marriott and Sheraton**; 15-minute ride by street car; street car located 1 block from **Hostel**), 2253 Carondelet Street, New Orleans, LA 70130, (504) 523-3014, HiNewOrlans@aol.com. **Rates start at:** Community - \$13.97 per person plus tax; Private w/community bath - \$34.95 per person plus tax; Private w/private bath and kitchen - \$39.95 (private rooms based on two persons per room)

through their concierge desks. Call 504-581-1000 (Marriott) or 504-525-2500 (Sheraton) at least one day in advance. Arrangements represent a contractual agreement between each individual and the child care provider. The Joint Meetings assumes no responsibility for the services rendered.

E-mail Services: The AMS and MAA are pleased to announce that Wolfram Research, Inc., makers of *Mathematica*, will once again sponsor e-mail access for all Joint Meeting participants. The hours of operation will be published

in the program. The AMS and MAA thank Wolfram Research for its generosity in providing this valuable service.

Information Distribution: Tables are set up in the exhibit area for dissemination of general information of possible interest to the members and for the dissemination of information of a mathematical nature not promoting a product or program for sale.

If a person or group wishes to display information of a mathematical nature promoting a product or program for sale, they may do so in the exhibit area at the Joint Books, Journals, and Promotional Materials exhibit for a fee of \$50 per item. Please contact the exhibits manager, MMSB, P.O. Box 6887, Providence, RI 02940, for further details.

If a person or group would like to display material in the exhibit area separate from the Joint Books table, the proponent must reimburse the AMS and MAA for any extra furnishings requested (tables, chairs, easels, etc.) in addition to payment of the \$50 per item fee. (This latter display is also subject to space availability.)

The administration of these tables is in the hands of the AMS-MAA Joint Meetings Committee, as are all arrangements for Joint Mathematics Meetings.

Local Information: See <http://www.experienceneworleans.com/> for information about the city.

Petition Table: At the request of the AMS Committee on Human Rights of Mathematicians, a table will be made available in the exhibit area at which petitions on behalf of named individual mathematicians suffering from human rights violations may be displayed and signed by meetings participants acting in their individual capacities. For details contact the director of meetings in the Providence office at 401-455-4137 or by e-mail at dms@ams.org.

Signs of moderate size may be displayed at the table but must not represent that the case of the individual in question is backed by the Committee on Human Rights unless it has, in fact, so voted. Volunteers may be present at the table to provide information on individual cases, but notice must be sent at least seven days in advance of the Meetings to the director of meetings in the Providence office. Since space is limited, it may also be necessary to limit the number of volunteers present at the table at any one time. The Committee on Human Rights may delegate a person to be present at the table at any or all times, taking precedence over other volunteers.

Any material that is not a petition (e.g., advertisements, résumés) will be removed by the staff. At the end of registration on Saturday any material on the table will be discarded, so individuals placing petitions on the table should be sure to remove them prior to the close of registration.

Telephone Messages: The most convenient method for leaving a message is to do so with the participant's hotel. Another method would be to leave a message at the Meeting Registration Desk from January 10 through 13 during the hours that the desk is open. These messages will be posted on the Math Meetings Message Board; however, staff at the desk will try to locate a participant in the event of a bona fide emergency. The telephone number will be published in the program.

Travel: The closest airport to the meetings is the New Orleans International Airport located in Kenner, about 15 miles from the New Orleans central business district.

US Airways has been selected as the official airline for these meetings because of its generally convenient schedules to New Orleans, LA. Given the volatility in airfares because of "fare wars," we cannot guarantee that these will be the lowest fares when you make your arrangements. However, we strongly urge participants to make use of this special deal if at all possible, since the AMS and MAA can earn complimentary tickets on US Airways. These tickets are used to send meetings' staff (not officers or other staff) to the Joint Mathematics Meetings, thereby keeping the costs of the meetings (and registration fees) down.

The following specially negotiated rates are available only for these meetings and exclusively to mathematicians and their families for the period January 7-16, 2000. Other restrictions/discounts may apply and seats are limited.

- 5% discount off First or Envoy Class and any published US Airways promotional round-trip fare. By purchasing your ticket 60 days or more prior to departure, you can receive an additional 5% bonus discount.

- 10% discount off unrestricted coach fares with seven-day advance purchase. By purchasing your ticket 60 days or more prior to departure, you can receive an additional 5% bonus discount.

For reservations call (or have your travel agent call) US Airways Group and Meeting Reservation Office toll-free at 877-874-7687 between 8:00 a.m. and 9:30 p.m. Eastern Time. Refer to **Gold File number 88111579**.

From the Airports to Downtown: The Louisiana Transit Company (504-592-0555) operates a shuttle service from the airport to several hotels (including the Marriott and Sheraton) every 15 minutes until the last flight of the night. The fare is \$10 each way.

Rates for taxi service are about \$21 for one or two passengers, \$24 for three, \$32 for four, or \$40 for five.

The fare for the public bus to the downtown area is \$1.10. Call 504-737-9611 for more information.

Driving Directions: Go east on the Airline Highway toward the airport exit by turning right. Turn right onto Hickory Ave. straight onto Dickory Ave. Turn left onto Earhart Expressway, which turns into Earhart Blvd. Turn right onto S. Carrollton Ave., then take the I-10 ramp toward Baton Rouge/Slidell. Merge onto I-10 E. Take exit #234B on the left toward Poydras St./Superdome. Turn left on to S. Claiborne Ave., then turn right onto Poydras St. Turn left onto Tchoupitoulas St., then left again onto Canal St.

Railway Transportation: For information on AMTRAK call 800-872-7245.

By Bus: Greyhound, 800-231-2222.

Weather: January weather in New Orleans is generally mild. Average daily maximum and minimum temperatures are 62 ° F and 43 ° F. Average precipitation is about 5.1 inches.

For more current information use your favorite net search engine or try the sites: <http://www.usatoday.com/weather/basemaps/nw722310.htm> or <http://www.weather.com/weather/us/zips/0130.html>.

Columbia, South Carolina

University of South Carolina

March 16–18, 2001

Meeting #963

Southeastern Section

Associate secretary: John L. Bryant

Announcement issue of *Notices*: January 2001

Program first available on e-MATH: February 1, 2001

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: Volume 22, Issue 2

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: November 28, 2000

For abstracts: January 23, 2001

Special Sessions

Algebraic Structures Associated with Lie Theory (Code: AMS SS B1), **Ben L. Cox**, **Elizabeth Jurisich**, and **Oleg Smirnov**, College of Charleston.

Discrete and Computational Geometry and Graph Drawing (Code: AMS SS A1), **Laszlo A. Szekely** and **Farhad Shahrokhi**, University of South Carolina.

Lawrence, Kansas

University of Kansas

March 30–31, 2001

Meeting #964

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: January 2001

Program first available on e-MATH: February 15, 2001

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: Volume 22, Issue 2

Deadlines

For organizers: Expired

For consideration of contributed papers in Special Sessions: December 12, 2000

For abstracts: February 6, 2001

Invited Addresses

S. Dale Cutkosky, University of Missouri, *Title to be announced*.

Alexandre Eremenko, Purdue University, *Title to be announced*.

Ken Ono, University of Wisconsin-Madison, *Title to be announced*.

Yongbin Ruan, University of Wisconsin-Madison, *Title to be announced*.

Special Sessions

Algebraic Geometry (Code: AMS SS C1), **B. P. Purnaprajna**, University of Kansas.

Commutative Algebra (Code: AMS SS A1), **Craig Huneke** and **Daniel Katz**, University of Kansas.

Number Theory (Code: AMS SS D1), **Ken Ono**, University of Wisconsin at Madison, **Crisitan Popescu**, University of Texas at Austin, and **Tonghai Yang**, Harvard University.

PDEs and Geometry (Code: AMS SS F1), **Marianne Korten** and **Lev Kapitanski**, Kansas State University.

Progress in Numerical Linear Algebra (Code: AMS SS E1), **Ralph Byers**, University of Kansas.

Set Theoretic Topology and Boolean Algebra (Code: AMS SS B1), **William Fleissner**, University of Kansas.

Las Vegas, Nevada

University of Nevada

April 21–22, 2001

Meeting #965

Western Section

Associate secretary: Bernard Russo

Announcement issue of *Notices*: February 2001

Program first available on e-MATH: March 8, 2001

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: Volume 22, Issue 2

Deadlines

For organizers: September 21, 2000

For consideration of contributed papers in Special Sessions: January 2, 2001

For abstracts: February 27, 2001

Special Sessions

Finite Element Analysis and Applications (Code: AMS SS B1), **Jichun Li**, University of Texas and University of Nevada, and **Michael Marcozzi**, **George Miel**, and **Darrell W. Pepper**, University of Nevada.

Geometric and Computational Group Theory (Code: AMS SS A1), **Eric M. Freden**, Southern Utah University, and **Eric L. Swenson**, Brigham Young University.

Hoboken, New Jersey

Stevens Institute of Technology

April 28–29, 2001

Meeting #966

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: February 2001

Program first available on e-MATH: March 15, 2001

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: Volume 22, Issue 2

Deadlines

For organizers: September 28, 2000

For consideration of contributed papers in Special Sessions: January 9, 2001

For abstracts: March 6, 2001

Invited Addresses

Alexander Barvinok, University of Michigan, Ann Arbor, *Title to be announced.*

Robert Calderbank, AT&T Laboratories Research, *Title to be announced.*

Alexei Miasnikov, City College, New York, *Title to be announced.*

Frank Sottile, University of Massachusetts at Amherst, *Title to be announced.*

Special Sessions

Analytic Number Theory (Code: AMS SS A1), **Milos A. Dostal**, Stevens Institute of Technology, and **Werner G. Nowak**, Vienna, Austria.

Computational Algebraic Geometry and its Applications (Code: AMS SS B1), **Serkan Hosten**, San Francisco State University, and **Frank Sottile**, University of Massachusetts at Amherst.

Morelia, Mexico

May 23–26, 2001

Meeting #967

Fourth International Joint Meeting of the AMS and the Sociedad Matemática Mexicana (SMM).

Associate secretary: John L. Bryant

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: Not applicable

Program issue of electronic *Notices*: Not applicable

Issue of *Abstracts*: Not applicable

Deadlines

For organizers: To be announced

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

For abstracts: To be announced

Lyon, France

July 17–20, 2001

First Joint International Meeting between the AMS and the Société Mathématique de France.

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced

Program issue of electronic *Notices*: Not applicable

Issue of *Abstracts*: Not applicable

Deadlines

For organizers: To be announced

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

For abstracts: To be announced

Columbus, Ohio

Ohio State University

September 21–23, 2001

Meeting #969

Central Section

Associate secretary: Susan J. Friedlander

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: February 21, 2001

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

For abstracts: To be announced

Invited Addresses

Yakov B. Pesin, Pennsylvania State University, *Title to be announced.*

Thaleia Zariphopoulou, University of Texas at Austin, *Title to be announced.*

Chattanooga, Tennessee

University of Tennessee, Chattanooga

October 5–6, 2001

Meeting #970

Southeastern Section

Associate secretary: John L. Bryant

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced
 Program issue of electronic *Notices*: To be announced
 Issue of *Abstracts*: To be announced

Deadlines

For organizers: March 5, 2001
 For consideration of contributed papers in Special Sessions: To be announced
 For abstracts: To be announced

Williamstown, Massachusetts

Williams College

October 13–14, 2001

Meeting #971

Eastern Section
 Associate secretary: Lesley M. Sibner
 Announcement issue of *Notices*: To be announced
 Program first available on e-MATH: To be announced
 Program issue of electronic *Notices*: To be announced
 Issue of *Abstracts*: To be announced

Deadlines

For organizers: March 13, 2001
 For consideration of contributed papers in Special Sessions: To be announced
 For abstracts: To be announced

Invited Addresses

Hubert Bray, Massachusetts Institute of Technology, *Title to be announced*.

Yisong Yang, Polytechnic University, *Title to be announced*.

Special Sessions

History of Mathematics (Code: AMS SS A1), **Glen R. Van Brummelen**, Bennington College, **Della D. Fenster**, Richmond University, and **James J. Tattersall**, Providence College.

Number Theory, Holomorphic Dynamics, and Algebraic Dynamics. (Code: AMS SS B1), **Robert L. Benedetto**, University of Rochester, **John W. Milnor**, IMS and SUNY Stony Brook, and **Kevin M. Pilgrim**, University of Missouri at Rolla.

Irvine, California

University of California Irvine

November 10–11, 2001

Meeting #972

Western Section
 Associate secretary: Bernard Russo
 Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced
 Program issue of electronic *Notices*: To be announced
 Issue of *Abstracts*: To be announced

Deadlines

For organizers: April 10, 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, 85th 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: John L. Bryant
 Announcement issue of *Notices*: To be announced
 Program first available on e-MATH: To be announced
 Program issue of electronic *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

Montréal, Quebec Canada

*Centre de Recherches Mathématiques,
Université de Montréal*

May 3–5, 2002

Eastern Section
 Associate secretary: Lesley M. Sibner
 Announcement issue of *Notices*: To be announced
 Program first available on e-MATH: To be announced
 Program issue of electronic *Notices*: To be announced
 Issue of *Abstracts*: To be announced

Deadlines

For organizers: October 3, 2001
 For consideration of contributed papers in Special Sessions: To be announced
 For abstracts: To be announced

Pisa, Italy

June 12-16, 2002

First Joint International Meeting between the AMS and the Unione Matematica Italiana.

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced

Program issue of electronic *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

Boston, Massachusetts

Northeastern University

October 5-6, 2002

Eastern Section

Associate secretary: Lesley M. Sibner

Announcement issue of *Notices*: To be announced

Program first available on e-MATH: To be announced

Program issue of electronic *Notices*: To be announced

Issue of *Abstracts*: To be announced

Deadlines

For organizers: March 6, 2002

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

For abstracts: To be announced

nounced

MEETINGS AND CONFERENCES