# 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, *Title to be announced* (Erdős Memorial Lecture).

**George Elliott**, University of Toronto, *Title to be announced.*

**Benson Farb**, University of Chicago, *Title to be announced.*

**Boris Tsyagan**, Pennsylvania State University, *Title to be announced.*

### 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.

*Innovative Programs and Projects That Work in Undergraduate Mathematics*, **Bathi Kasturiarachi**, Kent State University.

*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: August 29, 2000

### 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.*

**Thomas Wolff**, California Institute of Technology, *Title to be announced.*

### Special Sessions

*Abstract Wavelet Theory* (Code: AMS SS J1), **Lawrence W. Baggett**, University of Colorado, and **Kathy D. Merrill**, The Colorado College.

*Algebraic and Geometric Combinatorics* (Code: AMS SS A1), **Jesus De Loera**, University of California, Davis, and **Frank Sottile**, University of Wisconsin.

*Automorphic Forms and Representations* (Code: AMS SS N1), **Ehud Moshe Baruch** and **Olav Richter**, University of California, Santa Cruz, and **Dan Bump**, Stanford University.

*Banach Algebras* (Code: AMS SS K1), **Suren Grigoryan**, Kazan State University, and **Thomas Tonev**, University of Montana-Missoula.

*Diagrammatic Morphisms in Algebra, Category Theory, and Topology* (Code: AMS SS F1), **David Radford**, University of Illinois at Chicago, **Fernando Souza**, Los Alamos National Lab and University of Illinois at Chicago, and **David Yetter**, Kansas State University.

*Geometric and Symbolic Dynamical Systems* (Code: AMS SS D1), **Arek Goetz**, San Francisco State University, and **Luca Zamboni**, University of North Texas.

*Harmonic Analysis* (Code: AMS SS C1), **Christoph Thiele**, University of California, Los Angeles, and **Thomas Wolff**, California Institute of Technology.

*History of Mathematics* (Code: AMS SS B1), **Shawnee McMurran**, University of Redlands, and **James J. Tattersall**, Providence College.

*Low Genus Curves and Applications* (Code: AMS SS R1), **Kristin Lauter**, Microsoft, and **Harold Stark**, University of California, San Diego.

*Holomorphic Spaces* (Code: AMS SS E1), **Sheldon Axler** and **Alex Schuster**, San Francisco State University.

*Nonlinear Evolution Equations* (Code: AMS SS Q1), **Lev Kapitanski**, Kansas State University, and **Gustavo Ponce**, University of California, Santa Barbara

*Operator Algebras* (Code: AMS SS P1), **Steve Kaliszewski** and **John Quigg**, Arizona State University.

*Periodic and/or Multiple Solutions of Differential and Difference Equations* (Code: AMS SS L1), **Jorge Aarao** and **Mario Martelli**, Claremont McKenna College, and **Adolfo Rumbos**, Pomona College.

*Quantum Algebra* (Code: AMS SS H1), **Nicolai Reshetikhin**, University of California, Berkeley.

*Singularities and Algebraic Geometry* (Code: AMS SS G1), **Caroline Melles**, United States Naval Academy, and **Ruth Michler**, University of North Texas.

*Topics in Probability, with Emphasis on Markov Chains and Random Matrices* (Code: AMS SS M1), **Steve Evans** and **Yuval Peres**, University of California, Berkeley, **Amir Dembo**, Stanford University.

# 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, *Title to be announced*.

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

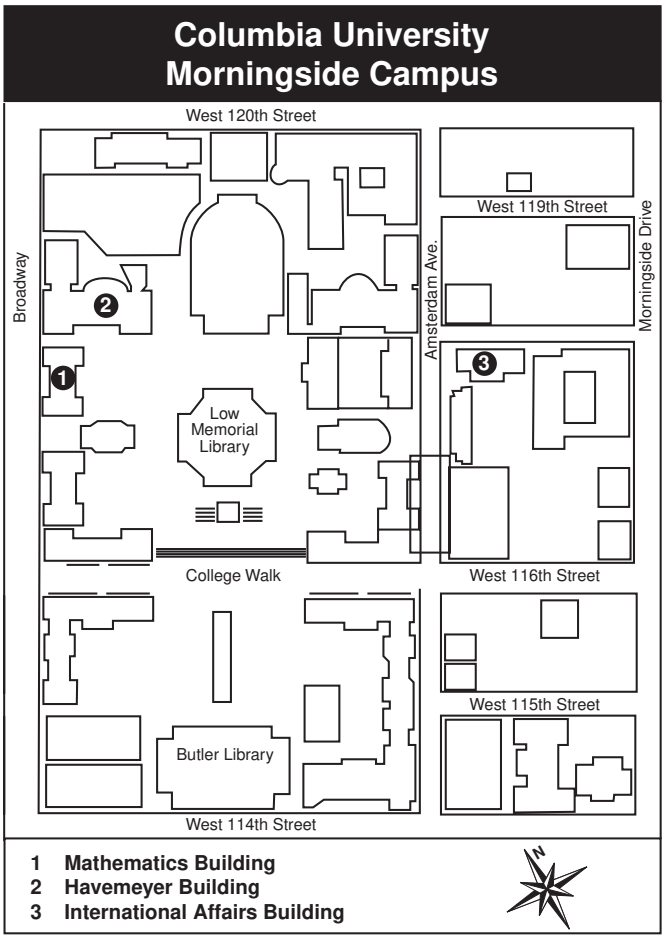
## Special Sessions

*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**, Université des Sciences et Technologies de Lille.

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

*Combinatorial Group Theory* (Code: AMS SS A1), **Gilbert Baumslag**, **Sean T. Cleary**, **Alexei Myasnikov**, and **Vladimir Shplirain**, 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. Seppala**, Florida State University.

*The Topology of 3-Manifolds* (Code: AMS SS B1), **Joan S. Birman** and **Brian S. Magnum**, Columbia University, and **Walter D. Neumann**, University of Melbourne.

## Accommodations

Paticipants should make their own arrangements directly with a hotel of their choice. Unfortunately, the New York City Marathon will take place this same weekend, so many of the hotels are already sold out. The AMS offers these possibilities:

**New York Marriott Financial Center**, 85 West St., New York, NY 10006; 212-385-4900 or fax: 212-227-8136; $219/single or double. The number of available rooms is very limited! Please state that you are with the American Mathematical Society meeting. **Deadline for reservations is October 13**.

**City Lights Bed & Breakfast Service** will arrange a room and breakfast in an apartment. Price range is about +/-$120/night, including private bath and continental breakfast. As of June 20 they had some availability. Call 212-737-7049 or fax 212-535-2755.

You may find success using a room-finding service. A competent service seems to be the New York Visitors Hotel Hotline, 1-800-634-6835, `www.hoteldiscount.com`; or call or e-mail Arg Stratton, 1-800-510-6937 (ext. 1320) or `astratton@180096hotel.com`. Please be very specific about the accommodations you need (single/double/price). Expect prices of +$180/night during this weekend.

## Food Service and Local Information

Campus cafeterias are not open on the weekends. There are numerous restaurants, diners, etc., all along Broadway and Amsterdam Avenue. Finding a place to eat is not a problem; however, choosing a place to eat from all the selections may be a problem.

The Columbia University home page is at `http://www.columbia.edu/`; the mathematics department home page is at `http://math.columbia.edu/`; a complete map of the campus is at `http://www.columbia.edu/cu/aboutcolumbia/maps/index.html`.

## Other Activities

**AMS Book Sale**: Examine the newest titles from AMS! Most books will be available at a special 50% discount offered

only at meetings. Complimentary coffee will be served, courtesy of AMS Membership Services.

### Parking

Although street parking can be found in the neighborhood, the following parking garages are located in the Columbia neighborhood: Hospital Parking, 114th St. between Broadway and Amsterdam Avenue; GGMC, 112th St. between Broadway and Amsterdam Avenue; Riverside Church, 120th St. between Riverside Drive and Claremont Avenue; HRF Corp. Parking, 108th St. between Columbus and Amsterdam Avenue; and Ca-Li Oto, 108th St. between Columbus and Amsterdam Avenue.

### Registration and Meeting Information

The meeting will take place at Columbia University-Morningside Campus. Sessions will be held in the Mathematics Building, International Affairs Building (IAB), and the Havemeyer Building. Invited Addresses and registration will take place in the Havemeyer Building. Registration will be open on Saturday from 7:30 a.m. to 5:00 p.m. and on Sunday from 8:00 a.m. to noon.

**Registration fees** (payable on site only) are $40/AMS or CMS members; $60/nonmembers; $15/emeritus members, students, or unemployed mathematicians. Fees are payable by cash, check, VISA, MasterCard, Discover, or American Express.

### Special Workshop

In conjunction with the AMS Special Session on the same topic, a one-day workshop on "Arrangements of Hyperplanes" will take place on Friday, November 3, from 9:30 a.m. to 6:00 p.m. in the Columbia University Department of Mathematics. The program will consist of 45-minute lectures from a handful of invited speakers. Please visit the workshop home page `http://www.math.neu.edu/~suciu/ams00.html`, or contact Michael Falk (`michael.falk@nau.edu`) or Alex Suciu (`alexsuciu@neu.edu`) for a schedule of talks and other details.

### Travel

New York City is served by three large airports: LaGuardia, JFK, and Newark Airports. The easiest way to reach Columbia University from the airport is by taxi. The average fare from LaGuardia Airport, the closest airport to the campus, is $25; this includes tolls and tips. Kennedy Airport has a flat fare of $30 to any single stop in Manhattan. This does not include tolls and tip, which will add another $10. Taxi service from Newark Airport is $65, including tolls and tips.

The following specially negotiated rates on **USAirways** are available exclusively to mathematicians and their families for the period November 1–8, 2000. Discounts apply only to travel within the continental U.S. Other restrictions may apply, and seats are limited. Receive a 5% discount off First or Envoy Class and any published USAirways promotional round-trip fare. By purchasing your ticket 60 days or more prior to departure, you can receive an additional 5% bonus discount. Or you may receive a 10% discount off unrestricted coach fares with seven-day advance purchase. For reservations call (or have your travel agent call) USAirways 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 18611161**.

**Bus Service**: Gray Line Express, 212-315-3006, provides service from both LaGuardia and Kennedy Airports to Grand Central Station and the Port Authority Bus Terminal. The trip from LaGuardia takes 30–45 minutes and costs $10. It takes 45–60 minutes from Kennedy at a cost of $12.

The M60, a city bus to/from LaGuardia, is convenient (116th and Broadway: 1/2 block up is the bus stop) and costs the price of a standard city fare, $1.50.

The MTA offers a Kennedy Airport shuttle bus to/from Kennedy Airport connecting to the subway A line. The shuttle/train trip takes approx. 120 minutes to/from the Upper West Side and costs the standard city fare, $1.50. Olympia Trails (212-964-6233) provides bus service from Newark Airport to Penn Station and the Port Authority Bus Terminal. The trip takes 45–60 minutes and costs $10 per person. From the Port Authority Bus Terminal follow the subway directions listed below.

**Subway**: The #1 and #9 trains stop at the Columbia University station at West 116th Street and Broadway and also stop at both Pennsylvania Station (Seventh Ave. between 31st and 33rd Streets) and the Port Authority Bus Terminal (between Eighth and Ninth Aves. and 40th and 42nd Streets). From Grand Central Station, shuttle service is available to Times Square, where it is possible to transfer to the #1 or #9 local. The express (#2 and #3) stops at the 96th Street station, where it is necessary to cross the platform and board the local.

**Local Bus**: Four bus lines (M4, M5, M11, M104) serve the Columbia neighborhood and stop directly in front of the campus. Crosstown buses connect with the #1 or #9 trains on Broadway or Seventh Avenue.

**By Car**: From the North: Take the New York Thruway (Route I-87) to the New England Thruway (I-95) south to the Cross Bronx Expressway (I-95) in the direction of the George Washington Bridge [the New England Thruway (I-95) becomes the Cross Bronx Expressway]. Bear right as you approach the bridge, and take the exit for the Henry Hudson Parkway south. Take the Saw Mill River Parkway south or Cross County Parkway west to Henry Hudson Parkway south. The most convenient route to Columbia is the 95th/96th Street exit off Henry Hudson Parkway (West Side Highway). Use the 95th Street offramp, and turn left onto Riverside Drive. Proceed north (uptown) to 116th Street. A right turn at 116th Street leads you to the campus gate.

From the West: Take the New Jersey Turnpike (I-95) north or I-80 east to George Washington Bridge. Follow signs as you cross bridge to exit for Henry Hudson Parkway south.

By car from Long Island: Take the Long Island Expressway or the Grand Central Parkway west to the Cross Island Parkway north. Cross the Throgs Neck Bridge onto the Cross Bronx Expressway (I-95 south), and proceed as "From the North".

### Weather

New York City temperatures in November are generally in the 40's and 50's.

# 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), **Marcel Griesemer** and **Roger T. Lewis**, University of Alabama at Birmingham, and **Michael P. Loss**, Georgia Institute of Technology.

*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.

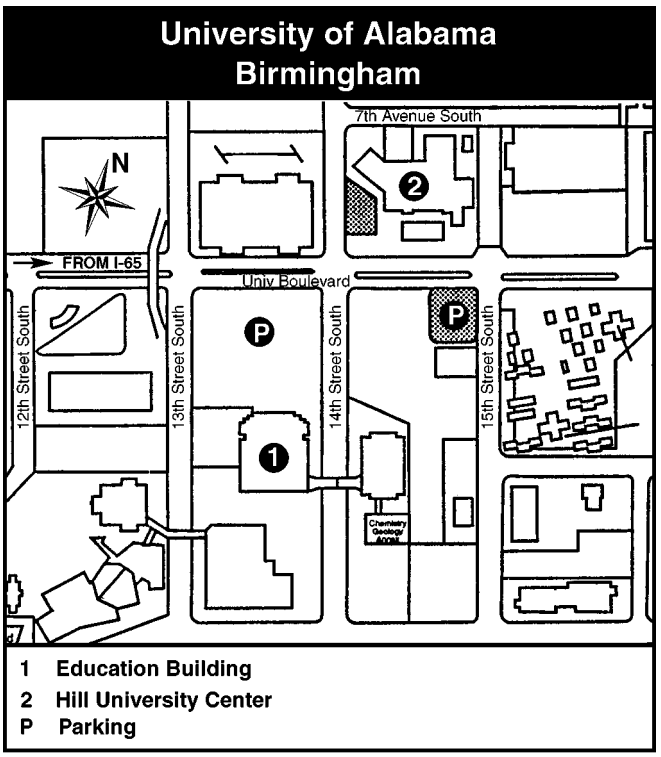
*Relations between Spectral Theory and Analytic Number Theory* (Code: AMS SS B1), **Robert M. Kauffman**, University of Alabama at Birmingham, and **Martin N. Huxley**, Cardiff University, Wales.

*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.

### Accommodations

Participants should make their own arrangements directly with a hotel of their choice. Special rates have been negotiated at the hotels listed below. Rates quoted do not



include sales tax of 8%. The AMS is not responsible for rate changes or for the quality of the accommodations. When making a reservation, participants should state that they are with the American Mathematical Society group.

**Best Western at Medical Center**, 800 11th Avenue South, Birmingham, AL 35205; phone 205-933-1900, 1-800-528-1234; fax: 205-933-8476; $55.95/single or double; a short walk from the Educational Building.

**Radisson Hotel Birmingham**, 808 20th Street South, Birmingham, AL; phone: 205-933-9000, 1-800-333-3333; $82/single or double, $92/triple, $102/quad; full-service hotel with complimentary airport shuttle (on availability), room service, swimming pool; located two blocks from the historic Five Points area, featuring many restaurants; about a 15- to 20-minute walk from the Educational Building.

### Food Service and Local Information

An extensive list of restaurants will be included in the program. For information about the UAB campus see `http://www.main.uab.edu/`. A campus map is at `http://www.uab.edu/Campus_map/`. The official site for the city of Birmingham is `http://www.ci.bham.al.us/`.

### Other Activities

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

### Reception

The Department of Mathematics invites all participants to a reception on Friday evening from 7:00 p.m. to 9:00 p.m. The Society thanks the UAB Department of Mathematics for its gracious hospitality.

### Registration and Meeting Information

Invited Addresses will take place in the auditorium in Hill Center. Other sessions and registration will take place in the Educational Building. Registration will be open on Friday from 12:30 p.m. to 5:00 p.m. and on Saturday from 7:30 a.m. to 5:00 p.m.

**Registration fees** (payable on site only) are $40/AMS or CMS members; $60/nonmembers; $15/emertus members, students, or unemployed mathematicians. Fees are payable by cash, check, VISA, MasterCard, Discover, or American Express.

### Parking

The parking lots on campus are free for meeting participants on Friday, Saturday, and Sunday (see map).

### Travel

The closest airport is the Birmingham International Airport, about 10 minutes from downtown.

The following specially negotiated rates on **USAirways** are available exclusively to mathematicians and their families for the period November 7–15, 2000. Discounts apply only to travel within the continental U.S. Other restrictions may apply, and seats are limited. Receive a 5% discount off First or Envoy Class and any published USAirways promotional round-trip fare. By purchasing your ticket 60 days or more prior to departure, you can receive an additional 5% bonus discount. Or you may receive a 10% discount off unrestricted coach fares with 7-day advance purchase. For reservations call (or have your travel agent call) USAirways 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 18611161**.

Taxi fare from the airport to UAB and hotels near campus costs about $20.

If you arrive at Birmingham airport and rent a car, take Airport Boulevard (the only road into the city). At about one mile you take I-20/I-59 West (turn right from Airport Boulevard). Stay on I-20/I-59 for five miles, until it crosses I-65. You need to stay in the left (!) lane. Then take I-65 South, and in about 2 miles take Exit 259B to the campus (see below).

**Driving Directions:** The UAB campus is next to downtown Birmingham, near Exit 259 off I-65.

From the South: On I-65, take Exit 259A and merge into University Boulevard (8th Ave. South). The EB is 200 yards from Exit 259A.

From the North: On I-65, take Exit 259B. You merge into 6th Ave. South, but it goes in the wrong direction (away from the campus). So turn left as soon as possible (on 9th Street or 8th Street) and then left again on Green Springs Hwy. It goes immediately under I-65 and into the UAB campus. At this point it becomes University Boulevard, and you are 200 yards from EB.

N.B. There are signs on highways I-20/59 and I-65 that say "University of Alabama at Birmingham". Just ignore them and follow the directions above. Other signs may lead you to the wrong parts of the campus.

### Weather

The weather is usually mild in mid-November: daytime temperatures range from 50° to 70° F. Rain is infrequent in November.

# 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*: August 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: September 1, 2000

### 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**, University of Paris VI 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**, City College (CUNY), 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** and **Min Yan**, Hong Kong University of Science and Technology, **Wen Xiu Ma**, City University of Hong Kong, and **Peter Olver**, University of Minnesota.

*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** and **Juncheng Wei**, Chinese University of Hong Kong, **Yanyan Li**, Rutgers University.

*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, *Title to be announced* (AMS-MAA).

**Jeffrey R. Weeks**, Canton, NY, *Measuring the universe* (AMS-MAA).

### Joint Special Sessions

*History of Mathematics* (Code: AMS SS K1), **Karen H. Parshall**, University of Virginia, and **David E. Zitarelli**, Temple University.

*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 Invited Addresses

**Bonnie Berger**, Massachusetts Institute of Technology, *Title to be announced*.

**Ingrid Daubechies**, Princeton University, *Title to be announced*.

**Igor B. Frenkel**, Yale University, *Title to be announced*.

**Ronald L. Graham**, University of California, San Diego, *Title to be announced* (AMS Josiah Willard Gibbs Lecture).

**Mark L. Green**, University of California, Los Angeles, *Title to be announced*.

**Michael J. Hopkins**, Massachusetts Institute of Technology, *Title to be announced*.

**János Kollár**, Princeton University, *Title to be announced* (AMS Colloquium Lecture).

## 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.

*Analytic Number Theory* (Code: AMS SS P1), **Dorian Goldfeld**, Columbia University.

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

*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.

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

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

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

*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.

*Discrete Geometry* (Code: AMS SS Y1), **Andras Bezdek**, Auburn University.

*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.

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

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

*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.

*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.

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

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

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

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

*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.

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

*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.

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

*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.

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

## Preliminary Announcement of MAA Contributed Paper Sessions

The organizers listed below solicit contributed papers pertinent to their sessions. Sessions generally limit presentations to ten minutes, but selected participants may extend their contributions up to twenty minutes.

Each session room contains an overhead projector and screen; blackboards are not available. Persons needing additional equipment should contact as soon as possible and prior to September 15, 2000, the session organizer whose

name is followed by an asterisk (*). Please note that the submission procedure has changed and the dates scheduled for these sessions remain tentative.

## Submission Procedures for MAA Contributed Papers

Submit your abstract directly to the AMS. Concurrently, send a one-page summary of your paper directly to the organizer indicated by an asterisk (*). The summary need not duplicate the information in the abstract. In order to enable the organizer(s) to evaluate the appropriateness of your paper, include as much detailed information as possible within the one-page limitation. Your abstract and summary must reach the AMS and the organizer by Friday, September 15, 2000.

The AMS will publish abstracts for the talks in the MAA sessions. Abstracts must be submitted on the appropriate AMS form. Electronic submission is available via the Internet or e-mail. No knowledge of LaTeX is necessary; however, LaTeX and $\mathcal{A}\mathcal{M}S$-LaTeX can be accommodated. These are the only typesetting systems that can be used if mathematics is included. To see descriptions and to view the electronic templates available, visit the abstracts submission page on the Internet at `http://www.ams.org/abstracts/instructions.html`, or send e-mail to `abs-submit@ams.org`, typing HELP as the subject line.

Completed e-mail templates must be sent to `abs-submit@ams.org` with SUBMISSION as the subject line. Abstracts submitted electronically are either quickly acknowledged with a unique abstract number assigned to the presentation or rejected with a short message on what information is missing or inappropriate. All questions concerning the submission of abstracts should be addressed to `abs-coord@ams.org`.

Here are the codes you will need. The meeting number is 962. The event code is the seven characters appearing before the title of the sessions shown below, e.g., MAA CP A1. The subject code is the last two-character letter/number combination from the event code list, e.g., A1, B1.

MAA CP A1 **Great Theorems of Mathematics**, Wednesday and Thursday mornings, organized by **Cheryl L. Olsen***, Department of Mathematics & Computer Science, Shippensburg University, Shippensburg, PA 17257; phone: 717-477-1360; fax: 717-477-4009; e-mail:`clolse@ship.edu`; and **Douglas E. Ensley**, Shippensburg University. This session focuses on expository talks on important theorems of mathematics. The talks should address as much history and applications as time will permit, but should make some effort to show the audience the spirit of the proof (or proofs) of the result. The idea is to present to a general audience theorems that "everyone has heard of" but for which the proof is not generally well known. The idea for this session comes from conversations overheard in department coffee rooms where mathematicians from different fields discuss the most significant results in their own area.

MAA CP B1 **Chaotic Dynamics and Fractal Geometry**, Wednesday and Thursday mornings, organized by **Denny Gulick***, Mathematics Department, University of Maryland, College Park, MD 20742-4015; phone: 301-405-5157; fax: 301-314-0827; e-mail: `dng@math.umd.edu`; and **Jon W. Scott**, Montgomery College. Ideas from chaotic dynamics and fractal geometry relate to most areas of the undergraduate mathematics curriculum. This session invites papers which investigate the impact of these two fields on undergraduate mathematics. The papers, which should have an expository flavor, might include new developments in either chaos or fractals, interesting or novel applications, undergraduate research experiences, or innovative approaches for exploring these topics in undergraduate mathematics.

MAA CP C1 **Innovative Uses of the World Wide Web in Teaching Mathematics**, Wednesday and Thursday afternoons, organized by **Marcelle Bessman***, Department of Mathematics, Jacksonville University, Jacksonville, FL 32224; phone: 904-744-3950, ext. 7304; e-mail: `mbessma@ju.edu`; and **Brian E. Smith**, McGill University. This contributed paper session will focus on creative uses of the World Wide Web in mathematics instruction. Proposals are solicited on original uses of Web resources in the classroom. We are looking for presentations involving the use of real data sets, instructional materials, interactive simulations, videoconferencing, or other topics of interest for educators who are currently using, or planning to use, the Web in their classes.

MAA CP D1 **Redefining What a Modern "College Algebra" Experience Means**, Wednesday and Thursday mornings, organized by **Sheldon P. Gordon***, Department of Mathematics, SUNY at Farmingdale, Farmingdale, NY 11735; phone: 516-451-4270; e-mail: `gordonsp@farmingdale.edu`; **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. The term "college algebra" encompasses a wide variety of offerings ranging from elementary algebra up through college algebra and trigonometry courses and even precalculus courses. What is common is an image of the students who take such courses—those who lack some or all of the traditional algebraic skills needed for calculus. Today there are many pressures to redefine all of these traditional courses, which has prompted a major MAA curriculum initiative to redefine what a "college algebra" experience should be. This session seeks contributed papers that will: (1) Present new visions for any of the courses that fall under the "college algebra" rubric. (2) Describe individual experiences implementing such courses. This includes new content, new pedagogical features (collaborative learning, student projects, communication of ideas, etc.), assessment and evaluation, student reactions to the courses, and so forth. (3) Discuss and/or demonstrate the use of technology in such courses. (4) Discuss what is known about enrollment trends relating to these courses. (5) Describe the connections between college algebra courses and courses in other disciplines. The session is being cosponsored by the Committee on the Undergraduate Program in Mathematics (CUPM), the Committee on Calculus Reform At the First Two Years (CRAFTY), the Committee on Two-Year Colleges

(CTYC), the Committee on Quantitative Literacy (CQL), and the CUPM Subcommittee on Service Courses.

MAA CP E1 **Innovative Practices in Statistics Education**, Friday and Saturday mornings, organized by **Mary M. Sullivan***, Rhode Island College, 600 Mt. Pleasant Avenue, Providence, RI 02908; phone: 401-456-9851; fax: 401-456-8379; e-mail: mmsullivan@ric.edu; **Carolyn K. Cuff**, Westminster College; and **Mary T. Parker**, Austin Community College. Statistics instruction that reflects current thinking includes data analysis and design of data production as well as probability and inference as major content areas. Students often have opportunities to produce real data and deal with the issues that arise in dealing with real data. With use of technology, students are able to analyze data more extensively, and they come to realize that statistical practice requires an iterative process of question, data, and analysis. Their conceptual understanding of statistics is quite different from understanding gained from analysis of contrived, "clean" data that appears in many texts. Students who have had active experiences with data collection and analysis using technology are better able to interpret computer output of statistical information produced by others and to consider whether conclusions are warranted. Faculty who teach statistics—in introductory courses, in sections of courses that satisfy general education requirements or prepare prospective elementary teachers, or in cooperation with faculty from other disciplines—are invited to contribute papers relative to data collection, use of technology, and other innovative, active learning experiences that they include in their statistics instruction.

MAA CP F1 **Courses and Programs That Illustrate Recommendations of the Mathematical Education of Teachers Document**, Wednesday and Thursday mornings, organized by **Judith L. Covington***, Department of Mathematics, LSU-Shreveport, One University Place, Shreveport, LA 71115; phone: 318-797-5354; fax: 318-795-4221; e-mail: jcovingt@pilot.lsus.edu. This session will focus on mathematics courses and programs for future teachers that illustrate the recommendations of the Mathematical Education of Teachers (MET) Document (available at http://www.maa.org/cbms/). Proposals should describe clearly the intended audience of the course, its mathematical content, and instructional strategies.

MAA CP G1 **Integrating Mathematics and Other Disciplines**, Friday and Saturday mornings, organized by **William G. McCallum***, Department of Mathematics, University of Arizona, Tucson, AZ 85721; phone 520-621-6886; fax: 520-621-8322; e-mail: wmc@math.arizona.edu; **Deborah Hughes Hallett**, University of Arizona; and **Yajung Yang**, SUNY, Farmingdale. The session will present discussions of the content of current mathematics courses in the first two years in light of the way other disciplines use mathematics and the expectations they have of our students, discussions of how applications of mathematics in other disciplines can be incorporated into mathematics courses in a way that enhances mathematical understanding, and presentations of exemplary courses or course modules. Submissions are encouraged from teachers in engineering, the physical and social sciences, and management and public policy, showing examples of how mathematics is used in their courses. Submissions are also encouraged from mathematicians who have successfully incorporated such material into their courses.

MAA CP H1 **Serving the Needs of Developmental Students: Who Are They, Where Do They Come From, Where Do They Go?** Wednesday and Thursday afternoons, organized by **Suzanne Dore***, Augsburg College, Campus Box #61, 2211 Riverside Avenue, Minneapolis, MN 55454; phone: 612-330-1059; fax: 612-330-1649; e-mail: doree@augsburg.edu; and **Bonnie Gold**, Monmouth University. Until we understand the needs of our developmental students, how can we decide what kinds of courses they need? These needs vary from one school to another. Contributions are invited from programs which have investigated the incoming background of their students, students' future plans, where the students actually end up, and how this knowledge has led to program changes. Summaries of research in these areas helpful to faculty teaching in these programs are also welcome.

MAA CP I1 **The Undergraduate Seminar in Mathematics**, Wednesday afternoon, organized by **Barry J. Arnow***, Department of Mathematics, Kean University of New Jersey, Union, NJ 07083; phone: 908-527-2494; fax: 908-527-3168; e-mail: barnow@turbo.kean.edu; and **George A. Avirappattu**, Kean University of New Jersey. This session of 10-minute talks will focus on the role and content of the mathematics seminar in an undergraduate program for majors. Presenters should address issues pertaining to appropriate topics and focus for such seminars, seminar objectives and how they are achieved and measured, requirements from student participants, equitable student participation, developing and measuring student presentation skills, the role of the faculty leader(s), relationship and interplay with other mathematics courses, appropriate place within the undergraduate curriculum, prerequisites and credits for enrollment, and equitable grading. We seek submissions that will share insights and experiences (both good and bad) of faculty members who have led or are planning such seminars.

MAA CP J1 **Computer Algebra Systems in Upper-Division Mathematics Courses**, Friday morning, **Kent M. Neuerburg***, Department of Mathematics, Southeastern Louisiana University, Hammond, LA 70402; phone: 504-549-2204; fax: 504-549-2099; e-mail: kneuerburg@selu.edu; and **Andrew Stuart Lang**, Oral Roberts University. The use of Computer Algebra Systems (CAS) in the undergraduate curriculum has become widespread over the past few years. However, most of the applications have been in the lower-division courses; in particular, these systems are seeing extensive use in Calculus I, II, and III. This session will provide the opportunity for participants to see applications of CAS in higher-level courses. Such courses may include ordinary and partial differential equations, numerical analysis, modern algebra, real and complex analysis, etc. Really, the list of courses that can utilize a CAS to aid learning is endless, and we hope that the session will reflect this. We hope to see applications in a variety of systems-standard packages like Mathematica, Maple, MathCAD, and MatLab, as well as more specialized packages like GAP, PARI, etc. The session would entertain general concept presenta-

tions, but would emphasize specific examples, activities, and resources for use in particular courses. We hope that the participants will leave with great ideas about how to incorporate a CAS activity into one of their courses.

MAA CP K1 **Implementation of National Projects on Local Campuses**, Saturday morning, organized by **Stuart Boersma***, Division of Mathematics, Alfred University, Alfred, NY 14802; phone: 607-871-2258; fax: 607-871-2339; e-mail: boersma@alfred.edu; and **Constant J. Goutziers**, SUNY at Oneonta. The role of mathematics educator has changed immensely over the last decade. Faculty are now expected to make proper use of technology, emphasize mathematical modeling, and develop interdisciplinary applications and/or courses. These expectations have spawned a variety of successful national projects. The purpose of this session is to enhance awareness of the different national projects and to encourage implementation at the local level. Papers are solicited regarding local adaptation and adoption of successful national projects aimed at enhancing the undergraduate mathematics curriculum. Submission of proposals via e-mail is preferred by the organizers.

MAA CP L1 **Classroom Demonstrations and Course Projects That Make a Difference**, Friday morning, organized by **David R. Hill***, Mathematics Department, Temple University, Philadelphia, PA 19122; phone: 215-204-1654; fax: 215-204-6433; e-mail: hill@math.temple.edu; **Sarah L. Mabrouk**, Boston University; and **Lila F. Roberts**, Georgia Southern University. The use of course projects and classroom demonstrations enables the instructor to show students that mathematics is meaningful and applicable in a variety of real-life situations. Demos, important tools for instruction in any class format, enable the instructor to engage the student on a level beyond that created by lectures. Projects are useful in helping students to apply the course material and to make connections between mathematics and the real world. This session invites presentations about favorite instructional demos and course projects appropriate for any level in the undergraduate mathematics curriculum designed to engage students and enable them to gain insight into mathematics. Presenters who discuss demos are encouraged to present the demonstration, if time and equipment allow, and to discuss how to use it in a classroom setting. Presenters who discuss projects are encouraged to discuss the specifics of how the project was conducted and how it was evaluated. Proposals should describe how the demo/project fits into the course, the use of technology or technology requirements, if any, and the effect of the demo/project on student attitudes toward mathematics.

MAA CP M1 **Putting the "Service" Back into Service Courses**, Saturday morning, organized by **Thomas L. Moore**, Department of Mathematics and Computer Science, Grinnell College, Grinnell, Iowa 50112; phone: 515-269-4206; fax: 515-269-4984; e-mail: mooret@grinnell.edu; and **Ahmed I. Zayed**, University of Central Florida. Traditionally, service course content in the mathematical sciences has been driven by the needs of client disciplines, needs which are often conflicting. If we were to consider "service" from the standpoint of students, what mathematical and quantitative skills and principles will serve students regardless of major? For this session we invite descriptions of innovative courses that serve students in a broad sense by teaching them mathematical or quantitative skills they can apply to their future studies and work. Papers should give specific details about goals, course development, implementation, and assessment.

MAA CP N1 **College Mathematics in Depth with Dynamic Mathematics Software**, Saturday morning, organized by **E. Paul Goldenberg***, Education Development Center, 55 Chapel Street, Newton, MA 02158-1060; phone: 617-618-2513; e-mail: pgoldenberg@edc.org; **Jean-Marie Laborde**, Laboratoire Leibnitz, Grenoble, France; and **Barbara Pence**, San Jose State University. This session will seek contributors to present creative uses of software for geometry, algebra, statistics, and other mathematical domains in support of both exploration and reasoning across a broad range of classical collegiate mathematics. In inviting contributors and selecting among contributions, we will give special priority to presentations that take the step beyond using the computer as a tool for motivation, experiment, or data collection purposes and put the focus on using these tools for the development of important content and sophisticated mathematical reasoning. As examples, we've seen presentations of explorations and extensions of vector fields, visualized with dynamic geometry software, linking symbolic and visual representations in ways that help students reason about differential equations. In another domain, exceptional statistical software now exists that moves beyond the processing of the data and helps students understand the nature and subtleties of the mathematics behind statistical analysis.

MAA CP P1 **Topics in Teaching, Learning, and Exploring Proof**, Wednesday afternoon, **Connie M. Campbell***, Department of Mathematics and Computer Studies, Millsaps College, Jackson, MS 39210; phone: 601-974-1371; e-mail: campbcm@millsaps.edi; **Draga D. Vidakovic**, Georgia State College; and **G. Joseph Wimbish**, Huntingdon College. For most, "proof" is the heart and soul of mathematical activity. This session is devoted to papers on proof in the classroom. We particularly invite papers on the following topics, but will consider others: learning theory-based expository or research-based essays, experiences derived from "transition" or "bridge" courses, the use of cooperative learning, and the effects of technology. In view of the NCTM Standards 2000, we invite discussion of the role of proof in grades K–12. It is also our plan to develop a network on issues in proof pedagogy. Papers should be submitted electronically to any of the three organizers.

MAA CP Q1 **Mathematics in the Age of Euler**, Thursday afternoon, **V. Frederick Rickey***, Department of Mathematical Sciences, United States Military Academy, West Point, NY 10996-1786; phone: 914-938-4010; fax: 914-938-2409; e-mail: fred-rickey@usma.edu; and **William W. Dunham**, Muhlenberg College. Leonhard Euler (1707-1783) ranks among the greatest of mathematicians. Building upon the achievements of the previous century—most notably differential and integral calculus—Euler and his contemporaries advanced the frontiers of mathematics

and influenced all that followed. This session invites expository contributions on the work of Euler and of other eighteenth-century mathematicians. Contributors might want to examine a theorem or two from Euler's nearly inexhaustible collected papers or describe more generally his explorations in a particular mathematical subfield. Of interest are reports of classroom experiences that have engaged the student with Euler's ideas.

MAA CP R1 **Outreach Programs for Women and Girls**, Friday morning, **Kathleen A. Sullivan***, Mathematics Department, Seattle University, Seattle, WA 98122; phone: 206-296-5931; fax: 206-296-2179; e-mail: ksulliva@seattleu.edu; and **Elizabeth G. Yanik**, Emporia State University. The papers will describe programs currently being offered to encourage women and girls to study mathematics. A wide variety of projects will be described, and the presenters will discuss what they have learned from implementing their programs.

MAA CP S1 **ARUME Session**, Wednesday and Thursday mornings, **Julie M. Clark***, Department of Mathematics & Computer Science, Emory & Henry College, Emory, VA 24327; phone: 540-944-6191; fax: 540-944-4592; e-mail: jmclark@ehc.edu. The Association for Research on Undergraduate Mathematics (ARUME) aims to foster a professional atmosphere for quality research in the teaching and learning of undergraduate mathematics by offering contributed paper sessions for mathematics educators and professional mathematicians interested in research on undergraduate mathematics education. Research papers that address issues concerning the teaching and learning of undergraduate mathematics are invited. Theoretical and empirical investigations using qualitative and quantitative methodologies are appropriate. These should be set within established theoretical frameworks and should further existing work. Reports on completed studies are especially welcome.

MAA CP T1 **General Contributed Paper Session**, Wednesday and Thursday afternoons, **Howard L. Penn***, Mathematics Department, United States Naval Academy, 572 Holloway Rd., Annapolis, MD 21402-5002; phone: 410-293-6768; fax: 410-293-4883; e-mail: hlp@usna.edu. This session is designed for papers that do not fit into one of the other sessions. Papers may be presented on any mathematics-related topic. Papers that fit into one of the other sessions should be sent to that organizer, not to this session. Papers should not be sent to more than one organizer. E-mail submissions are preferred.

# 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: August 16, 2000
For consideration of contributed papers in Special Sessions: November 28, 2000
For abstracts: January 23, 2001

# Lawrence, Kansas

*University of Kansas*

**March 30–31, 2001**

### Meeting #964

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: August 30, 2000
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

### 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*: 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: September 21, 2000
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

### 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*: 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: September 28, 2000
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

### 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.

# 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*: 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

# Columbus, Ohio

*Ohio State University*

**September 21–23, 2001**

### Meeting #968

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 #969

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 #970

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 #971

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: May 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