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 the AMS website. See `http://www.ams.org/meetings/`. Programs and abstracts will continue to be displayed on the AMS website in the Meetings and Conferences section until about three weeks after the meeting is over. Final programs for Sectional Meetings will be archived on the AMS website in an electronic issue of the *Notices* as noted below for each meeting.

Mainz, Germany

June 16–19, 2005
Thursday – Sunday

Meeting #1008

Joint International Meeting with the Deutsche Mathematiker-Vereinigung (DMV) and the Oesterreichische Mathematische Gesellschaft (OMG)
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: February 2005
Program first available on AMS website: Not applicable
Program issue of electronic *Notices*: Not applicable
Issue of *Abstracts*: Not applicable

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: Expired
For abstracts: Expired

The scientific information listed below may be dated. For the latest information, see `www.ams.org/amsmtgs/internmtgs.html`.

Invited Addresses

Hélène Esnault, University of Essen, *Deligne's integrality theorem in unequal characteristic and rational points over finite fields*.

Richard Hamilton, Columbia University, *The Ricci flow*.

Michael J. Hopkins, Massachusetts Institute of Technology, *Solving algebraic equations, up to homotopy*.

Christian Krattenthaler, University of Lyon-I, *Exact and asymptotic enumeration of vicious walkers with a wall interaction*.

Frank Natterer, University of Muenster, *Imaging and inverse problems for partial differential equations*.

Horng-Tzer Yau, New York University and Stanford University, *Dynamics of Bose-Einstein condensates*.

Special Sessions

Affine Algebraic Geometry, **Shreeram Abhyankar**, Purdue University, **Hubert Flenner**, Ruhr University Bochum, and **Makar Limanov**, Wayne State University.

Algebraic Combinatorics, **Patricia Hersh**, Indiana University-Bloomington, **Christian Krattenthaler**, University of Lyon-I, and **Volkmar Welker**, Philipps University Marburg.

Algebraic Cryptography, **Dorian Goldfeld**, Columbia University, **Martin Kreuzer** and **Gerhard Rosenberger**, Universität Dortmund, and **Vladimir Shpilrain**, The City College of New York.

Algebraic Cycles, **Eric Friedlander** and **Marc Levine**, Northwestern University, and **Fabien Morel**, Université Paris.

Algebraic Geometry, **Yuri Tschinkel**, Georg-August-Universität Göttingen, and **Brendan E. Hassett**, Rice University.

Dirac Operators, Clifford Analysis and Applications, **Klaus Gürlebeck**, University of Weimar, **Mircea Martin**, Baker University, **John Ryan**, University of Arkansas, and **Michael Shapiro**, IPN Mexico.

Discrete Geometry, **Jacob Eli Goodman**, The City College of New York (CUNY), **Emo Welzl**, Eidgen Technische Hochschule, and **Gunter M. Ziegler**, Technical University of Berlin.

Function Spaces and Their Operators, **Ernst Albrecht**, Universität des Saarlandes, **Raymond Mortini**, Université de Metz, and **William Ross**, University of Richmond.

Functional Analytic and Complex Analytic Methods in Linear Partial Differential Equations, **R. Meise**, University of Dusseldorf, **B. A. Taylor**, University of Michigan, and **Dietmar Vogt**, University of Wuppertal.

Geometric Analysis, **Victor Nistor**, Pennsylvania State University, and **Elamr Schrohe**, Universität Hannover.

Geometric Topology and Group Theory, **Cameron McA Gordon**, The University of Texas at Austin, **Cynthia Hog-Angeloni**, Johann Wolfgang Goethe-Universität, and **Wolfgang Metzler**, University of Frankfurt.

Group Theory, **Luise-Charlotte Kappe**, SUNY at Binghamton, **Robert Fitzgerald Morse**, University of Evansville, and **Gerhard Rosenberger**, University of Dortmund.

Hilbert Functions and Syzygies, **Uwe Nagel**, University of Kentucky, **Irena Peeva**, Cornell University, and **Tim Römer**, Universität Osnabrück.

History of Mathematics (including a special workshop on Mathematics and War), **Thomas W. Archibald**, Acadia University, **John H. McCleary**, Vassar College, **Moritz Epple**, University of Stuttgart, and **Norbert Schappacher**, Technische Universität Darmstadt.

Homotopy Theory, **Paul G. Goerss**, Northwestern University, **Hans-Werner Henn**, Institut de Recherche Mathématique Avancée, Strasbourg, and **Stefan Schwede**, Universität Bonn.

Hopf Algebras and Quantum Groups, **M. Susan Montgomery**, University of Southern California, and **Hans-Jurgen Schneider**, University of Munich.

Mathematical Physics, **Laszlo Erdös**, Mathematisches Institut der Albert Ludwigs Universität, and **Michael P. Loss**, Georgia Institute of Technology.

Mathematics Education, **Gunter Torner**, Universität Duisburg-Essen, and **Alan Schoenfeld**, School of Education, Berkeley.

Modules and Comodules, **Sergio López-Permouth**, Ohio University, and **Robert Wisbauer**, University of Düsseldorf.

Multiplicative Arithmetic of Integral Domains and Monoids, **Scott Chapman**, Trinity University, San Antonio, **Franz Halter-Koch**, University of Graz, and **Ulrich Krause**, Universität Bremen.

Nonlinear Elliptic Boundary Value Problems, **Thomas Bartsch**, Universitaet Giessen, and **Zhi-Qiang Wang**, Utah State University.

Nonlinear Waves, **Herbert Koch**, University of Dortmund, and **Daniel I. Tataru**, University of California Berkeley.

Ordinary Differential, Difference, and Dynamic Equations, **Werner Balser**, Universität Ulm, **Martin Bohner**, University of Missouri-Rolla, and **Donald Lutz**, San Diego State University.

Quantum Knot Invariants, **Anna Beliakova**, Universität Zürich, and **Uwe Kaiser**, Boise State University.

Representations and Cohomology of Groups and Algebras, **Dave Benson**, University of Georgia, and **Henning Krause**, Universität Paderborn.

Set Theory, **Joel Hamkins**, City University New York, **Peter Koepke**, Universität Bonn, and **Benedikt Löwe**, Universiteit van Amsterdam.

Spectral Analysis of Differential and Difference Operators, **Evgeni Korotyaev**, Humboldt-University Berlin, **Boris Mityagin**, The Ohio State University, and **Gerald Teschl**, University of Vienna.

Stochastic Analysis on Metric Spaces, **Laurent Saloff-Coste**, Cornell University, **Karl-Theodor Sturm**, University of Bonn, and **Wolfgang Woess**, Graz Technical University.

Topics in Applied Mathematics: Algebraic Approaches to Preconditioning, **Heike Fassbender**, Technical University of Braunschweig, and **Andreas Frommer**, University of Wuppertal.

Topics in Applied Mathematics: Control Theory, **Peter Benner**, Technical University of Chemnitz.

Topics in Applied Mathematics: Mathematical Problems of Mechanics, **Friedrich Pfeiffer** and **Jurgen K. Scheurle**, Technical University of Munich.

Topics in Applied Mathematics: Multiscale Problems, Oscillations in Partial Differential Equations, and Homogenization, **Alexander Mielke**, University of Hannover.

Topics in Applied Mathematics: Numerical Partial Differential Equations/Equations with Inherent Conditions, **Rolf Jeltsch**, Eidgen Technische Hochschule, **Maria Lukacova-Medvidova**, Technical University of Hamburg, and **J. Mac Hyman**, Los Alamos National Laboratory.

Topology of Manifolds, **Matthias Kreck**, University of Heidelberg, and **Andrew Ranicki**, University of Edinburgh.

Annandale-on-Hudson, New York

Bard College

October 8–9, 2005

Saturday – Sunday

Meeting #1009

Eastern Section
Associate secretary: Lesley M. Sibner
Announcement issue of *Notices*: August 2005
Program first available on AMS website: August 25, 2005
Program issue of electronic *Notices*: October 2005
Issue of *Abstracts*: Volume 26, Issue 4

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: June 21, 2005
For abstracts: August 16, 2005

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Persi Diaconis, Stanford University, *Erdős picture of "most things"* (Erdős Memorial Lecture).

Harold Rosenberg, University of Paris VII, *Minimal and constant mean curvature surfaces in homogeneous 3-manifolds*.

Alice Silverberg, University of California Irvine, *Applying number theory and algebraic geometry to cryptography*.

Christopher Sogge, Johns Hopkins University, *Estimates for eigenfunctions of the Laplacian*.

Benjamin Sudakov, Princeton University, *Probabilistic reasoning and Ramsey theory*.

Special Sessions

Algebraic and Geometric Combinatorics (Code: SS 12A), **Cristian P. Lenart**, State University of New York at Albany, and **Lauren L. Rose** and **Sheila Sundaram**, Bard College.

Extremal and Probablistic Combinatorics (Code: SS 11A), **Benjamin Sudakov**, Princeton University.

Geometric Group Theory (Code: SS 1A), **Sean Cleary**, The City College of New York, and **Melanie I. Stein**, Trinity College.

Geometric Transversal Theory (Code: SS 3A), **Richard Pollack**, Courant Institute, New York University, and **Jacob Eli Goodman**, The City College of New York.

Global Theory of Minimal Surfaces (Code: SS 6A), **David A. Hoffman**, Mathematical Sciences Research Institute, and **Harold Rosenberg**, University of Paris VII.

History of Mathematics (Code: SS 2A), **Patricia R. Allaire**, Queensborough Community College, CUNY, **Robert E. Bradley**, Adelphi University, and **Jeff Suzuki**, Bard College.

Homological Aspects of Commutative Algebra (Code: SS 4A), **Alexandre Tchernev**, University of Albany, SUNY, and **Janet Vassilev**, University of Arkansas.

Infinite Groups (Code: SS 10A), **Anthony M. Gaglione**, United States Naval Academy, **Benjamin Fine**, Fairfield University, and **Dennis Spellman**, Philadelphia University.

Invariants of Graphs and Matroids (Code: SS 8A), **Gary Gordon** and **Lorenzo Traldi**, Lafayette College.

Mathematical Methods for the Analysis of Images and High-Dimensional Data (Code: SS 13A), **Erik M. Bollt**, Clarkson University, and **Rick Chartrand**, Los Alamos National Laboratory.

Measurable, Symbolic, and Tiling Dynamical Systems (Code: SS 9A), **Natalie Preibe Frank**, Vassar College, and **Samuel J. Lightwood**, Western Connecticut State University.

Special Functions and Orthogonal Polynomials: Theory and Applications (Code: SS 7A), **Diego Dominici**, State University of New York at New Paltz.

Theory of Infinite-Dimensional Lie Algebras, Vertex Operator Algebras, and Related Topics (Code: SS 5A), **Antun Milas**, SUNY at Albany, **Alex J. Feingold**, Binghamton University, and **Yi-Zhi Huang**, Rutgers University.

Johnson City, Tennessee

East Tennessee State University

October 15–16, 2005

Saturday – Sunday

Meeting #1010

Southeastern Section
Associate secretary: Matthew Miller
Announcement issue of *Notices*: August 2005
Program first available on AMS website: September 1, 2005
Program issue of electronic *Notices*: October 2005
Issue of *Abstracts*: Volume 26, Issue 4

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: June 28, 2005
For abstracts: August 23, 2005

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Alberto Bressan, Pennsylvania State University, *Optimal transportation metrics and nonlinear wave equations*.

Assaf Naor, Microsoft Research, *The b-Lipschitz theory of metric spaces: A survey of recent progress and algorithmic applications*.

Prasad V. Tetali, Georgia Institute of Technology, *Markov chain mixing: An update*.

Rekha R. Thomas, University of Washington, *Groebner bases: From theory to applications and back*.

Special Sessions

Approximation Theory (Code: SS 5A), **Robert Gardner**, East Tennessee State University, and **Narendra Kumar Govil**, Auburn University.

Commutative Ring Theory (Code: SS 1A), **David F. Anderson** and **David E. Dobbs**, University of Tennessee at Knoxville.

Discrete Models in Biology (Code: SS 7A), **Debra Knisley**, East Tennessee State University, and **Michael A. Langston**, University of Tennessee, Knoxville.

Geometry and Algorithms in Metric Spaces (Code: SS 8A), **W. J. Bo Brinkman** and **Beata Randrianantoanina**, Miami University.

Mathematical Applications in Survival Analysis and Biostatistics (Code: SS 6A), **Don Hong** and **Tiejian Wu**, East Tennessee State University.

Mathematical Aspects of Wave Propagation Phenomena (Code: SS 2A), **Boris P. Belinskiy**, University of Tennessee at Chattanooga, and **Anjan Biswas**, Tennessee State University.

Mathematical Education of Teachers (Code: SS 3A), **Frederick Norwood** and **Michel Helfgott**, East Tennessee State University.

Nonlinear PDE Evolutionary Systems and Their Control (Code: SS 9A), **George Avalos**, University of Nebraska-Lincoln, and **Irena M. Lasiecka**, University of Virginia.

Nonlinear Wave Equations and Applications (Code: SS 4A), **Alberto Bressan** and **Yuxi Zheng**, Pennsylvania State University.

Lincoln, Nebraska

University of Nebraska in Lincoln

October 21–23, 2005

Friday – Sunday

Meeting #1011

Central Section
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: August 2005
Program first available on AMS website: September 8, 2005
Program issue of electronic *Notices*: October 2005
Issue of *Abstracts*: Volume 26, Issue 4

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: July 5, 2005
For abstracts: August 30, 2005

The scientific information listed below may be dated. For the latest information, see `www.ams.org/amsmtgs/sectional.html`.

Invited Addresses

Howard A. Masur, University of Illinois at Chicago, *Billiards in polygons: Connections of geometry and complex analysis to dynamical systems.*

Alejandro Uribe, University of Michigan, *Title to be announced.*

Judy Walker, University of Nebraska, *Title to be announced.*

Jack Xin, University of Texas, *Title to be announced.*

Special Sessions

Algebraic Geometry (Code: SS 1A), **Brian Harbourne**, University of Nebraska-Lincoln, and **Bangere P. Purnaprajna**, University of Kansas.

Analysis of Partial Differential and Integral Equations (Code: SS 18A), **Congming Li**, University of Colorado.

Association Schemes and Related Topics (Code: SS 22A), **Sung Yell Song**, Iowa State University, and **Paul M. Terwilliger**, University of Wisconsin.

Calculus of Variations (Code: SS 17A), **Mikil Foss**, University of Nebraska-Lincoln, and **Giovanni Leoni**, Carnegie Mellon University.

Combinatorial Matrix Theory (Code: SS 10A), **Leslie Hogben**, Iowa State University, and **Bryan L. Shader**, University of Wyoming.

Commutative Algebra (Code: SS 14A), **Lars Winther Christensen**, **Srikanth B. Iyengar**, and **Sean M. Sather-Wagstaff**, University of Nebraska-Lincoln.

Dynamic Equations on Time Scales (Code: SS 5A), **Lynn H. Erbe** and **Allan C. Peterson**, University of Nebraska-Lincoln.

Geometric Methods in Group Theory and Semigroup Theory (Code: SS 6A), **Susan M. Hermiller** and **John C. Meakin**, University of Nebraska-Lincoln, and **Zoran Sunik**, Texas A&M University.

Geometry of Differential Equations (Code: SS 11A), **Jeanne Nielsen Clelland**, University of Colorado, **Irina A. Kogan**, North Carolina State University, and **Zhijun Qiao**, University of Texas-Pan American.

Graph Theory (Code: SS 8A), **Andrew J. Radcliffe**, University of Nebraska-Lincoln, **Zsuzsanna Szaniszlo**, Valparaiso University, and **Jonathan Cutler**, University of Nebraska-Lincoln.

K-Theory and Algebraic Cycles (Code: SS 16A), **Christian Haesemeyer**, University of Illinois at Urbana-Champaign, and **Gregory Grant Piepmeyer** and **Mark Edward Walker**, University of Nebraska-Lincoln.

Large Cardinals in Set Theory (Code: SS 4A), **Paul B. Larson**, Miami University, **Justin Tatch Moore**, Boise State University, and **Ernest Schimmerling**, Carnegie Mellon University.

Mathematical and Engineering Aspects of Coding Theory (Code: SS 3A), **Lance Perez** and **Judy Walker**, University of Nebraska-Lincoln.

Mathematical Ecology (Code: SS 9A), **David Logan**, University of Nebraska-Lincoln, and **William Robert Wolesensky**, College of St. Mary.

Mathematical Education of Teachers (Code: SS 15A), **W. James Lewis**, University of Nebraska-Lincoln, **Cheryl Lynn Olsen**, Shippensburg University of Pennsylvania, and **Ira J. Papick**, University of Missouri-Columbia.

Mathematical and Engineering Aspects of Coding Theory (Code: SS 13A), **Lance Perez**, University of Nebraska-Lincoln, **Judy Walker**, University of Nebraska-Lincoln.

Nonlinear Analysis and Control of Partial Differential Equations (Code: SS 13A), **George Avalos**, **Petronela Radu**, **Mohammad A. Rammaha**, and **Richard L. Rebarber**, University of Nebraska-Lincoln.

Randomness in Computation (Code: SS 7A), **John M. Hitchcock**, University of Wyoming, **Aduri Pavan**, Iowa State University, and **Vinodchandran Variyam**, University of Nebraska-Lincoln.

Recent Progress in Operator Algebras (Code: SS 2A), **Allan P. Donsig** and **David R. Pitts**, University of Nebraska-Lincoln.

Representation Theory of Noetherian Rings (Code: SS 12A), **Roger A. Wiegand** and **Sylvia Margaret Wiegand**, University of Nebraska-Lincoln.

Scattering and Spectral Problems in Geometry (Code: SS 21A), **Peter A. Perry**, University of Kentucky, and **Alejandro Uribe**, University of Michigan.

Undergraduate Research (Code: SS 19A), **Richard L. Rebarber** and **Gordon S. Woodward**, University of Nebraska-Lincoln.

Universal Algebra and Order (Code: SS 20A), **John William Snow**, Sam Houston State University, and **Japheth L. M. Wood**, Chatham College.

Eugene, Oregon

University of Oregon

November 12–13, 2005

Saturday – Sunday

Meeting #1012

Western Section
Associate secretary: Michel L. Lapidus
Announcement issue of *Notices*: September 2005
Program first available on AMS website: September 29, 2005
Program issue of electronic *Notices*: November 2005
Issue of *Abstracts*: Volume 26, Issue 4

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: July 26, 2005
For abstracts: September 20, 2005

The scientific information listed below may be dated. For the latest information, see `www.ams.org/amsmtgs/sectional.html`.

Invited Addresses

Matthew Foreman, University of California Irvine, *Title to be announced.*

Mark Haiman, University of California Berkeley, *Title to be announced.*

Wilhelm Schlag, California Institute of Technology, *Title to be announced.*

Hart H. Smith, University of Washington, *Title to be announced.*

Special Sessions

Algebraic Combinatorics and Geometry (Code: SS 7A), **Sara C. Billey**, University of Washington, and **Mark Haiman**, University of California Berkeley.

Algebraic Geometry Motivated by Physics (Code: SS 9A), **Alexander Polishchuk** and **Arkady Vaintrob**, University of Oregon.

Algebraic Topology of Moduli Spaces (Code: SS 8A), **Boris I. Botvinnik**, University of Oregon, **Uwe Kaiser**, Boise State University, and **Dev Sinha**, University of Oregon.

Applications of Algebraic Topology (Code: SS 12A), **Daniel Dugger** and **Hal Sadofsky**, University of Oregon.

K-Theory in M-Theory (Code: SS 6A), **Gregory D. Landweber**, University of Oregon, and **Charles F. Doran**, University of Washington.

New Directions in Spectral Theory and Geometric Analysis (Code: SS 11A), **Leon Friedlander**, University of Arizona, and **Patrick McDonald**, New College of Florida.

Noncommutative Algebra and Noncommutative Birational Geometry (Code: SS 3A), **Arkady Dmitrievich Berenstein**, University of Oregon, and **Vladimir Retakh**, Rutgers University.

Partial Differential Equations with Applications (Code: SS 4A), **Alexander Panchenko**, Washington State University, **R. E. Showalter**, Oregon State University, and **Hong-Ming Yin**, Washington State University.

Regular Algebras and Noncommutative Projective Geometry (Code: SS 2A), **Brad Shelton**, University of Oregon, **Michaela Vancliff**, University of Texas at Arlington, and **James J. Zhang**, University of Washington.

Representations of Groups and Algebras (Code: SS 5A), **Jonathan W. Brundan**, **Alexander S. Kleshchev**, and **Viktor Ostrik**, University of Oregon.

Resolutions (Code: SS 1A), **Christopher Alan Francisco**, University of Missouri, and **Irena Peeva**, Cornell University.

Wavelets, Frames, and Related Expansions (Code: SS 10A), **Marcin Bownik**, University of Oregon, and **Darrin M. Speegle**, St. Louis University.

Taichung, Taiwan

Tung-Hai University

December 14–18, 2005

Wednesday – Sunday

Meeting #1013

First Joint International Meeting between the AMS and the Taiwanese Mathematical Society.
Associate secretary: John L. Bryant
Announcement issue of *Notices*: June 2005
Program first available on AMS website: Not applicable
Program issue of electronic *Notices*: Not applicable
Issue of *Abstracts*: Not applicable

Deadlines

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

Watch the Official Website maintained by the local organizers at www.math.thu.edu.tw/2005ims/en/index.htm for additional program details and links to sites for hotels, tours, and other local information.

Organizers interested in proposing a Special Session should send the session name, subtopics, organizers, invited speakers, and any other relevant details to tms@math.ntu.edu.tw no later than June 30. The themes of newly proposed sessions should not overlap any sessions already approved.

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/internmtgs.html.

Invited Addresses

Ching-Shui Cheng, Institute of Statistical Science, Academia Sinica, *Title to be announced*.

Lawrence Ein, University of Illinois at Chicago, *Title to be announced*.

Chang-Shou Lin, National Chung Cheng University, *Title to be announced*.

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

Jing Yu, National Tsing Hua University, *Title to be announced*.

Jiu-Kang Yu, Purdue University, *Title to be announced*.

Special Sessions

Affine Algebraic Geometry, **Ming-Chang Kang**, National Taiwan University, and **Kwai-Man Fan**, National Chung Cheng University.

Algebraic Geometry, **Jung-Kai Chen**, National Taiwan University, **Chin-Lung Wang**, National Central University, and **Robert Lazarsfeld**, University of Michigan.

Differential Geometry, **Dong-Ho Tsai**, National Tsing Hua University, and **Bennett Chow**, University of California San Diego.

Discrete Mathematics (Graph Coloring), **Gerard J. Chang**, National Taiwan University, **Douglas B. West**, University of Illinois at Urbana-Champaign, and **Xuding Zhu**, National Sun Yat-sen University.

Dynamics and Differential Equations, **Song-Sun Lin**, National Chiao Tung University, and **Shui-Nee Chow**, Georgia Institute of Technology.

Lie Algebra and Representation Theory, **Shun-Jen Cheng**, National Taiwan University, and **Brian J. Parshall** and **Weiqiang Wang**, University of Virginia.

Number Theory (Arithmetic Geometry over Local and Global Fields), **Liang-Chung Hsia**, National Central University, and **William A. Cherry**, University of North Texas.

Operator Theory and Control, **Fang-Bo Yeh**, Tung-Hai University, and **Nicholas J. Young**, University of Newcastle.

Optimization and Applications, **Soon-Yi Wu**, National Cheng Kung University, and **Shu-Cherng Fang**, Industrial Engineering and Operations Research, North Carolina State University.

Partial Differential Equations and Geometric Analysis, **Chiun-Chuan Chen** and **Yng-Ing Lee**, National Taiwan University, **Sun-Yung Alice Chang**, Princeton University, and **Robert J. Sibner**, Graduate College, City University of New York.

Probability, **Tai-Ho Wang**, National Chung Cheng University, **Ching-Tang Wu**, National Kaohsiung University, and **George Yin**, Wayne State University.

Scientific Computing, **Wei-Cheng Wang**, National Tsing-Hua University, and **Thomas Y. Hou**, California Institute of Technology.

Statistical Modeling and Applications, **Ming-Yen Cheng**, National Taiwan University, and **Jianqing Fan**, Princeton University.

Contributed Papers

There will be a session for contributed papers. The submission deadline is September 14, 2005; you will receive a reply regarding the acceptance of your abstract no later than November 1. Details will be provided under the "Submission of abstracts" section of the official conference website by the end of June.

Abstracts

Abstract submission procedures will be published on the official conference website by the end of June.

Accommodations

Hotel reservation procedures will be published on the official conference website by the end of June.

Restaurants/Food Service

A box lunch will be provided daily to all registered participants. On campus there are two dormitory cafeterias, a coffee shop, a food mall, and a restaurant. Details can be found at http://www.thu.edu.tw/english/swf/map_english/map_new.swf. There are also many restaurants and food stands within a 15-minute walking distance from campus.

Registration and Meeting Information

The meeting will take place at Tunghai University, 181 Taichung Harbor Road, Section 3 Tiachung 40704, Taiwan. For more information about the campus see www.thu.edu.tw/english/enindex.htm.

Registration, plenary addresses, and Special Sessions will be held in the Humanities Building (floors B1, 1F, and 2F); see the floor plans at http://www.math.thu.edu.tw/2005ims/place.htm.

Registration fees paid by September 30 are US$80/members, US$100/nonmembers, and US$20/students payable by credit card through the official website. Registration fees after September 30 are US$100/members, US$120/nonmembers, and US$20/students. On-site registration fees

are NT3300, payable in Taiwan dollars only. As of 4/29/05, US$1=NT31.450

Social Events

Tickets must be reserved in advance for these events.

All registered participants are invited to a Welcome Banquet on the evening of December 15 at the Howard Prince Hotel. There is no extra charge for registered participants. Guest tickets are US$20.

A tour to Chitou Forest Recreational Area has been arranged especially for conference participants for the afternoon of December 16. See www.math.thu.edu.tw/2005ims/en/Chitou.htm. Giant trees, green bamboo, winding trails, chirping birds, croaking frogs, fog-enshrouded scenery, and fresh air characterize the Chitou Forest Recreation Area. Take a walk in the woods, relax in the tranquility, and recharge your mind. Scenic overlooks and abundant plant and bird life are hallmarks of this pleasant area. Don't miss the architecturally unique bamboo cottage located in the quiet Mong-Tsung bamboo forest. Also visit the Bamboo House, where the house and all the furnishings are made from this wonderfully versatile plant. The cost for the tour is US$10 or NT300.

Travel and Maps

An excellent site for general information about traveling to Taiwan and the many wonderful things the country has to offer is found at http://www.taiwan.net.tw/lan/cht/index/index.asp.

The conference will be held at Taichung which is about 100 miles from Chiang Kai-Shek International Airport (http://www1.cksairport.gov.tw/english/) Participants are advised to use CKS airport. Airport taxis charge according to the meter plus a 50 percent surcharge (highway tolls not included), and provide transport to anywhere in Taiwan. Typical fare to Taichung is around NT$3,200. Air-conditioned limousine buses (with space for luggage) leave for Taichung City every thirty minutes. The cost is around NT$250 and the trip takes about two hours. It is suggested that you take a taxi to the hotels after getting off the bus at Chaoma station. The cost for a taxi from the station will be about NT$150. Refer to http://www.cksairport.gov.tw/english/transportation/taichung.htm for further information.

Participants holding passports from these countries do not need to apply for a visa (see www.boca.gov.tw/~boca2000/en/exempte.htm for additional rules as well as procedures for some other countries): Australia, Austria, Belgium, Brunei Darussalam, Canada, Costa Rica, Denmark, Finland, France, Germany, Greece, Ireland, Iceland, Italy, Japan, Republic of Korea, Liechtenstein, Luxembourg, Malaysia, Malta, Monaco, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, U.K. and U.S.A.

For other foreign participants see the regulations and frequently asked questions from the Bureau of Consular Affairs at http://www.boca.gov.tw/english/index.htm. Here you will also find a visa application form to download. Applications must be sent for processing to a ROC Embassy/Mission; a list is available through the bureau website.

Watch the official webpage of this conference cited in the first paragraph of this announcement for further details and up-to-date information.

San Antonio, Texas

Henry B. Gonzalez Convention Center

January 12–15, 2006

Thursday – Sunday

Meeting #1014

Joint Mathematics Meetings, including the 112th Annual Meeting of the AMS, 89th Annual 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), the winter meeting of the Association for Symbolic Logic (ASL), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).
Associate secretary: Matthew Miller
Announcement issue of *Notices*: October 2005
Program first available on AMS website: November 1, 2005
Program issue of electronic *Notices*: January 2006
Issue of *Abstracts*: Volume 27, Issue 1

Deadlines

For organizers: Expired
For consideration of contributed papers in Special Sessions: August 3, 2005
For abstracts: September 28, 2005

AMS Invited Addresses

Herbert Edelsbrunner, Duke University, *Title to be announced.*

David Eisenbud, Mathematical Sciences Research Institute, *Title to be announced* (Retiring Presidential Address).

Charles L. Fefferman, Princeton University, *Title to be announced.*

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

Hendrik W. Lenstra Jr., Universiteit Leiden, *Title to be announced* (Colloquium Lectures).

Dusa McDuff, SUNY at Stony Brook, *Title to be announced.*

MAA Invited Addresses

Keith J. Devlin, Center for the Study of Language and Information, Stanford University, *Title to be announced.*

Naomi Fisher, University of Illinois at Chicago, *Title to be announced* (Retiring Presidential Address).

Robert E. Megginson, University of Michigan, Ann Arbor, *Title to be announced.*

Francis Edward Su, Harvey Mudd College, *Title to be announced.*

Call for MAA Contributed Papers

The MAA Committee on Contributed Paper Sessions solicits contributed papers pertinent to the sessions listed below. Contributed paper session organizers generally limit presentations to ten or fifteen minutes. Each session room contains an overhead projector and screen; blackboards will not be available. Speakers needing additional audio-visual equipment should contact, as soon as possible but prior to September 28, 2005, the session organizer whose name is followed by an asterisk (*). Organizers have been advised that the majority of speakers in a session must require the use of additional audio-visual equipment in order to justify the expenditure. Please note that the dates and times scheduled for these sessions remain tentative.

Philosophy of Mathematics (MAA CP A1), Thursday morning; **Roger Simons***, Rhode Island College (rsimons@ric.edu), and **Satish C. Bhatnagar**, University of Nevada. This session, sponsored by the SIGMAA for the Philosophy of Mathematics, invites papers on any topic in the philosophy of mathematics except logic and set theory. Possible topics include the nature of mathematics, the nature of mathematical objects, the nature of mathematical knowledge, the relation between mathematics and the physical world, and the role of esthetics in the development of mathematics.

Mathlets for Teaching and Learning Mathematics (MAA CP B1), Thursday and Friday mornings; **David Strong***, Pepperdine University (david.strong@pepperdine.edu); **Thomas Leathrum**, Jacksonville State University; and **Joe Yanik**, Emporia State University. This session seeks to provide a forum in which presenters may demonstrate mathlets and related materials that they have created or further developed. Mathlets are small computer-based (but ideally platform-independent) interactive tools for teaching math, frequently developed as World Wide Web materials such as scripts or Java applets, but there may be many other innovative variations. Mathlets allow students to experiment with and visualize a variety of mathematical concepts, and they can be easily shared by mathematics instructors around the world.

Post-secondary Mathematics Assessment: Needs and Challenges (MAA CP C1), Thursday morning; **Gloria Dion***, Educational Testing Service (gdion@ets.org); **Daryl Ezzo**, Educational Testing Service; and **Luis Saldivia**, Educational Testing Service. We invite the submission of papers related to the mathematics assessment of college students. Topics of interest for this session include admissions testing, placement or proficiency testing, course assessments, outcomes testing, and exit exams. We are especially interested in innovative programs and experiences with integrating technology into assessment; performance or portfolio assessments; the uses and impact of national tests; assessing students with disabilities; placement testing for incoming students whose high school experience is in a standards-based curriculum; outcomes testing at critical junctures, e.g., following developmental courses; diagnostic and formative assessments; and other new directions in assessment or research related to the mathematics assessment of college students.

Professional Development Programs for K–12 Teachers (MAA CP D1), Thursday morning; **Zsuzsanna Szaniszlo***, Valparaiso University (zsuzsanna.szaniszlo@valpo.edu); **Laurie Burton**, Western Oregon University; **Judith Covington**, LSU Shreveport; and **Patricia Hale**, California State Polytechnic University, Pomona. The mathematical community has long recognized the importance of teacher education. PMET (Preparing Mathematicians to Educate Teachers) is a prime example of projects that aim to help college mathematics faculty to train teachers. The next step in this endeavor is to include mathematicians in the professional development of in-service K–12 teachers. All over the country many small- and large-scale projects exist to provide a mutually beneficial opportunity for mathematicians to work with K–12 mathematics teachers. The directors of these projects will share their experiences developing and implementing the projects, including both mathematical and organizational issues. The session invites talks that showcase successful in-service training programs for K–12 mathematics teachers that utilize college and university mathematics faculty. The talks should reflect on every aspect of the program and include a description of the experiences of mathematicians. Programs that are easily replicable will be given priority. The submissions should include the grade levels of the participating teachers.

Number-Theoretic Applications (MAA CP E1), Thursday afternoon; **Thomas Koshy***, Framingham State College (tkoshy@frc.mass.edu), and **Thomas Moore**, Bridgewater State College. The advent of modern technology has brought a new dimension to the beauty and power of number theory. Once considered the purest of pure mathematics, it is increasingly used in the rapid development of technology in a number of areas. The various fascinating applications have confirmed that human ingenuity and creativity are boundless. Relevant and thought-provoking applications establish a strong and meaningful bridge between number theory and a number of other areas. Historical anecdotes, woven throughout a number theory course, give a meaningful, historical perspective to the development of the subject. They add a human face and touch on the development of the subject, and should provide a meaningful context for prospective and in-service teachers in mathematics. Attendees of the session should be able to take these anecdotes to their own classes to excite their students and share their enthusiasm with others. This contributed paper session focuses on interesting applications of and historical anecdotes in number theory and on the relevance of computers in the study of number theory. It is primarily aimed at number theory enthusiasts who enjoy teaching number theory for mathematics majors and in-service and preservice teachers.

Teaching Mathematics Courses Online (MAA CP F1), Thursday afternoon; **Kate McGivney***, Shippensburg University (kgmcgi@ship.edu), and **Cheryl Olsen**, Shippensburg University. In recent years there has been an increasing trend for undergraduate institutions to offer

mathematics courses online. This session will focus both on presenting successful strategies for teaching such courses as well as describing shortcomings in delivering mathematics online. Consideration will be given to courses where at least fifty proposals that address issues including, but not limited to, designing effective means of communication between students and the instructor, managing group projects and assignments, incorporating various technologies into the course, and implementing successful assessment strategies are welcome. Papers that address how to design an online course that meets the same course goals as a traditionally taught course are of particular interest. Finally, data based on student experiences from learning in an online environment are welcome.

Teaching and Assessing Modeling and Problem Solving (MAA CP G1), Thursday afternoon; **Mike Huber***, United States Military Academy (michael.huber@usma.edu), and **Alex Heidenberg**, United States Military Academy. Developing problem-solving skills in the modeling sense is a central component in refocusing courses to emphasize process, conceptual understanding, and student growth. Universities and colleges are now writing institutional goals that address the capabilities of their graduates. How do we measure success in teaching our students to be effective problem solvers? This session invites presentations about courses that focus on the process of problem solving as a vehicle to learning mathematics at the precalculus/introductory calculus levels, with special emphasis on modeling. Of particular value will be presentations that offer assessment techniques in problem-solving courses. These presentations can include course philosophy, midterm examinations, attitude surveys, past projects, and other successful methods of assessment where students have become competent and confident problem solvers. Each presentation should address the specific goals in developing problem solvers as well as the assessment techniques used to measure attainment of those goals.

Getting Students to Discuss and to Write about Mathematics (MAA CP H1), Thursday and Friday afternoons; **Martha Ellen Murphy Waggoner***, Simpson College (waggoner@simpson.edu); **Charlotte Knotts-Zides**, Wofford College; and **Harrison W. Straley**, Wheaton College. This session invites papers about assignments and projects that require students to communicate mathematics through in-class oral presentations that they make or in-class discussions that they must lead and motivate, and through written assignments and/or papers. These assignments can include analysis and applications of mathematics, presentations of and analysis of proofs, presentations about famous mathematicians and the mathematics that they studied, and assignments/projects that utilize creative writing. Each presenter is encouraged to discuss how the use of the assignment/project helped students to improve their understanding of mathematics and their ability to communicate mathematics. Of particular interest is the effect of such projects/assignments/presentations throughout the course on the students' understanding of mathematics, their communication of mathematics, and their attitude toward mathematics.

Using History of Mathematics in Your Mathematics Courses (MAA CP I1), Friday morning; **Richard Jardine***, Keene State College (rjardine@keene.edu), and **Amy Shell-Gellasch**, Granfenwoer, Germany. This session solicits talks that describe ways to use or embed the history of mathematics in the collegiate mathematics curriculum. Talks should discuss ways to use history to enhance the teaching of mathematical subjects as opposed to ways to teach history of mathematics courses.

Innovative Teaching/Learning Ideas Using Technology in the Teaching of Courses before College Algebra (MAA CP J1), Friday morning; **Ed Laughbaum***, The Ohio State University (elaughba@math.ohio-state.edu), and **Mohammad H. Ahmadi**, University of Wisconsin-Whitewater. In this session we are looking for creative ideas that demonstrate how faculty are using handheld graphing or computer technology to enhance teaching and learning in remedial/developmental algebra courses. Examples might involve graphing calculator apps, the use of function as a central theme, teaching techniques that promote understanding, portable e-lessons, electronic class polling as formative assessment, etc.

Research and Other Mathematical Experiences for Students outside the Classroom (MAA CP K1), Friday morning; **Kay Somers***, Moravian College, (mekbs01@moravian.edu); **Susan Morey**, Texas State University; **Sivaram K. Narayan**, Central Michigan University; and **Jody Sorensen**, Grand Valley State University. Mathematics "happens" both inside and outside the classroom, and in fact many mathematics majors are drawn to the subject through a special event sponsored by a student chapter or math club or through special research projects and programs. This session seeks presentations by academic, industrial, business, and/or student mathematicians so that the audience will be encouraged to organize and run special events for their students. Descriptions of activities could include, but are not limited to, special lectures, workshops for students, math days/fairs, student conferences, recreational mathematics activities, problem-solving activities and contests, general community-building activities, and student consulting projects. We especially encourage information about student research projects and programs, including program logistics and project ideas. Information on how such activities are organized and carried out, what activities especially grab students' interests, how students are contacted and encouraged to participate, and how the events are funded will be especially helpful. This session is organized by the MAA Committee on Undergraduate Student Activities and Chapters and by the CUPM Subcommittee on Undergraduate Research.

Courses below Calculus: A Continuing Focus (MAA CP L1), Friday and Saturday mornings; **Mary Robinson***, University of New Mexico-Valencia Campus (maryrobn@ unm.edu); **Florence S. Gordon**, New York Institute of Technology; **Laurette Foster**, Prairie View A&M University; **Arlene Kleinstein**, Farmingdale State University of New York; **Norma Agras**, Miami Dade Community College; and **Linda Martin**, Albuquerque T-VI. The MAA, AMATYC, and NCTM have been working together on a national initiative to refocus the courses below calculus to better serve the

majority of students taking these courses. The goal of the initiative has been and continues to be to encourage courses that place much greater emphasis on conceptual understanding and realistic applications of the mathematics compared to traditional courses that too often are designed to develop algebraic skills needed for calculus. In support of the emphasis placed on this topic by the MAA, AMATYC, and NCTM within their committees and executive boards, this session will address the courses below calculus, with particular emphasis on offerings in college algebra and precalculus. We seek presentations that present new visions for such courses, discuss implementation issues (such as faculty training, placement tests, introduction of alternative tracks for different groups of students, etc., related to offering such courses), present results of studies on student performance and tracking data in both traditional and new versions of these courses and in follow-up courses, and discuss the needs of other disciplines from courses at this level. This session is cosponsored by the CRAFTY, the Committee on Two Year Colleges, and the Committee on Service Courses.

Mathematics of Sports and Games (MAA CP M1), Friday afternoon; **Sean Forman***, Saint Joseph's University (sforman@sju.edu), and **Doug Drinen**, Sewanee: University of the South. When applied to the sporting arena, mathematics can provide both compelling classroom examples and interesting research problems. Baseball has long been mined for interesting statistics examples ranging from regression and probability to the game-theoretic aspects of in-game strategy (for example, Albert and Bennett's Curve Ball presents introductory statistics through baseball statistics). Recent books on jai alai, football, and a few other sports have likewise studied those sports through a mathematical lens. The economics of sports is now covered by its own journal, and the statistics publication *Chance* routinely discusses statistical examples in sports. Games have likewise taken on additional interest with the explosion of the professional poker circuit and interest in simulation and combinatorics relating to poker and other games of chance. The objectives of this session include the presentation of interesting classroom examples utilizing examples from sports and games and the discussion of research topics relating to sports and games.

Mathematical Connections in the Arts (MAA CP N1), Friday afternoon; **Douglas E. Norton***, Villanova University (douglas.norton@villanova.edu); **Reza Sarhangi**, Towson University; and **Nathaniel A. Friedman**, State University of New York, Albany. This session seeks interdisciplinary abstracts relating mathematics and one or more of the arts, considered in the broadest sense: architecture, dance, music, literature, theater, film, the visual arts, and others. Number, pattern, line, shape, and symmetry have long been mathematical tools at the disposal of the arts. Increasingly, the various expressions of artistic form have lent themselves to aesthetic presentations of mathematical topics and results. Mathematical concepts inform artistic presentation, while artistic presentation illuminates mathematics. In both directions, new technologies provide new possibilities. Altogether, the new approaches and new tools provide new opportunities for teaching and for outreach to the general public about the perhaps unexpected place of mathematics in relation to the arts, culture, and society. Session objectives include: (i) explore old and new connections between math and the arts, from ancient Islamic tiles to contemporary folk arts, from perspective in paintings to Möbius sculptures; and (ii) demonstrate the use of new technologies and new looks at old technologies to illustrate connections between mathematics and the arts.

Research on the Teaching and Learning of Undergraduate Mathematics (MAA CP O1), Friday afternoon; **Bill Martin***, North Dakota State University (william.martin@ndsu.edu); **Barbara Edwards**, Oregon State University; and **Mike Oehrtman**, Arizona State University. Research papers that address issues concerning the teaching and learning of undergraduate mathematics are invited. Appropriate for this session are theoretical or empirical investigations conducted within clearly defined theoretical frameworks, using either qualitative or quantitative methodologies. Of highest priority are proposals that report on completed studies that further existing work in the field.

On Achieving Quantitative Literacy (MAA CP P1), Friday afternoon; **Aaron Montgomery***, Central Washington University (montgoaa@cwu.edu); **Stuart Boersma**, Central Washington University; and **Semra Kilic-Bahi**, Colby Sawyer College. The issue of quantitative literacy (QL) has become one of the challenging topics in the education community, as many schools are developing programs to improve their students' ability to use quantitative information in their lives. Many are faced with the difficulty of establishing the role of QL in the undergraduate mathematics curriculum as well as agreeing on necessary QL skills for students. The organizers of this session invite papers that will contribute to the ongoing discussion of quantitative literacy, quantitative reasoning, and/or numeracy. Papers contributed to this session should attempt to address topics such as: working definitions of QL; assessable QL standards; the development of a QL program; the development of QL-related courses and course material including modules, or units within a course; the assessment of the QL skills of students; and the assessment of a QL program.

Mathematics of Chemistry (MAA CP Q1), Saturday morning; **George Rublein***, College of William and Mary (gtrubl@math.wm.edu). Mathematics makes its appearance early on in college-level chemistry courses. Physical chemistry, which is heavily laced with mathematical models, has a reputation as the most difficult course in the undergraduate chemistry curriculum. The treatment of mathematics in chemistry textbooks often bears little resemblance to the approaches that students see in mathematics courses. This session solicits contributions that show examples of models drawn from chemistry that might comfortably appear in the calculus, differential equations of linear algebra courses in which chemistry students are commonly enrolled. Chemical thermodynamics, stoichiometry, and chemical kinetics are good sources for such models.

Mathematics Experiences in Business, Industry, and Government (MAA CP R1), Saturday morning; **Phil Gustafson***, Mesa State College (pgustafs@mesastate.edu), and **Michael Monticino**, University of North Texas. This

contributed paper session will provide a forum for mathematicians with experience in business, industry and government (BIG) to present papers or discuss projects involving the application of mathematics to BIG problems. BIG mathematicians as well as faculty and students in academia who are interested in learning more about BIG practitioners, projects, and issues will find this session of interest. This session is sponsored by the MAA Business, Industry and Government Special Interest Group (BIG SIGMAA).

Countering "I Can't Do Math": Strategies for Teaching Underprepared, Math-Anxious Students (MAA CP S1), Saturday and Sunday mornings; **Bonnie Gold***, Monmouth University (bgold@monmouth.edu); **Suzanne Dorée**, Augsburg College; and **Richard Jardine**, Keene State College. How can we create a comfortable learning environment for underprepared or math-anxious students, and, in particular, how can we constructively assess student learning? What classroom practices are especially effective with such students, and how does research on student learning inform those practices? How might the recommendations of the 2004 CUPM Curriculum Guide influence our approach in teaching developmental or introductory courses to better reach these students? This session invites papers on all aspects of "what works" in teaching underprepared, math-anxious students.

Teaching Operations Research in the Undergraduate Classroom (MAA CP T1), Saturday morning; **Christopher J. Lacke***, Rowan University (lacke@rowan.edu), and **Paul E. Fishback**, Grand Valley State University. This session solicits papers highlighting innovative instructional strategies and assessment methods in the introductory undergraduate operations research sequence. Suggested topics include, but are not limited to, course projects, case studies, technology demonstrations, cooperative learning activities, and writing assignments. Papers may focus on original teaching materials or the creative use of previously existing ones, but all papers should provide specific learning objectives addressed by the use of such materials. Each submission must focus on operations research topics at the undergraduate level, including those in the introductory undergraduate operations research sequence or undergraduate courses in stochastic processes, queuing theory, network optimization, etc. In addition to the abstract sent to the AMS, the organizers request that they be sent a course syllabus relating to the submission.

My Favorite Demo: Innovative Strategies for Mathematics Instructors (MAA CP U1), Saturday morning and afternoon; **David R. Hill***, Temple University (hill@math.temple.edu), and **Lila F. Roberts**, Georgia College & State University. Mathematics instructors use a myriad of innovative techniques for teaching mathematical concepts. Technology readily available in colleges and universities has provided a means to boost creativity and flexibility in lesson design. Tools an instructor utilizes may include specialized computer applications, animations and other multimedia tools, Java applets, physical devices, games, etc. This contributed paper session will focus on novel demos that mathematics instructors have successfully used in their classrooms to facilitate learning. Mathematical content areas will include precalculus, calculus, elementary probability, and selected postcalculus topics. This session invites (1) demos that introduce a topic, (2) demos that illustrate how concepts are applicable, (3) demos that tell a story or describe the development of a procedure, and (4) demos that lead to an activity that involves the class. Presenters of demos are encouraged to give the demonstration, if time and equipment allow, and to discuss how to use it in a classroom setting. Proposals should describe how the demo fits into a course; the use of technology or technology requirements, if any; and the effect of the demo on student attitudes toward mathematics. Presenters should strive to include information regarding the effectiveness of the demo and assessment techniques employed.

Mathematics and Popular Culture (MAA CP V1), Saturday afternoon; **Sarah J. Greenwald***, Appalachian State University (greenwaldsj@appstate.edu), and **Christopher Goff**, University of the Pacific. One way that mathematics and popular culture interact is through Hollywood. Computer animators for blockbuster filmmakers like Pixar use mathematical algorithms in their work. In addition, television series such as *Numb3rs*, and movies like *A Beautiful Mind*, *Mean Girls*, and *Proof* (expected in 2005) offer varied portrayals of people with mathematical talent. These references to mathematics in popular culture can reveal, reflect, and even shape how society views mathematics. In the classroom, using popular culture can be a powerful technique for engaging diverse audiences. Capitalizing on student enjoyment of popular culture can alleviate math anxiety, energize shy and quiet students, and provide a creative introduction to an in-depth study of the related mathematics. This session invites presentations on all aspects related to mathematics and popular culture, including music, movies, television, artwork, and other media. Presentations could focus on how mathematics is changing Hollywood and movies or how popular culture can be used to understand the way society views mathematicians and their mathematics. Conversely, presentations could focus on how appearances of and references to mathematics in popular culture have been used creatively and effectively in mathematics courses to reduce math anxiety and motivate students to explore significant mathematics.

My Three Favorite Original Calculus Problems (MAA CP W1), Saturday afternoon; **J. D. Phillips***, Wabash College (phillipj@wabash.edu), and **Tim Pennings**, Hope College. This session is for those who, while teaching single and multivariable calculus over the years, have thought of a couple of clever or novel problems with solid pedagogical value that they would like to share with others. In particular, we are looking for original problems suitable for homework assignments or challenging test questions. (We are not looking for extended modeling projects and open-ended problems, since good collections of these already exist.) We hope to organize these into a booklet for publication that could be used as a resource for calculus courses. Submissions may include from two to four problems. Participants should bring copies of their problems to the session for distribution. Each problem should begin on a new page. In addition to the abstract sent to the AMS, the organizers have requested that they

be sent: (i) a statement of the problem, (ii) a brief explanation of why it is interesting and pedagogically valuable, and (iii) a complete solution leading to an answer in closed form.

First Steps for Implementing the Recommendations of the Guidelines for Assessment and Instruction in Statistics Education (GAISE) College Report (MAA CP X1), Saturday afternoon; **Ginger Holmes Rowell***, Middle Tennessee State University (rowell@mtsu.edu), and **Thomas L. Moore**, Grinnell College. The Guidelines for Assessment and Instruction in Statistics Education (GAISE) Project, funded by the American Statistical Association (ASA), has written a report that focuses on introductory college statistics courses. In addition to providing a historical overview of these courses and offering a list of goals for statistically literate students, this report updates the 1992 recommendations by George Cobb for teaching these courses. The report contains the following six recommendations: (1) emphasize statistical literacy and develop statistical thinking, (2) use real data, (3) stress conceptual understanding rather than mere knowledge of procedures, (4) foster active learning, (5) use technology to develop conceptual understanding and analyze data, and (6) use assessments to improve and evaluate learning. In a 2004 summary of the report, Robin Lock stated that putting these recommendations into practice may be an evolutionary process. For example, an instructor may take a first small step by finding or developing a case study of statistical interest. Instructors are invited to submit proposals describing successful first steps at implementing one or more of these recommendations. Innovative approaches for successful implementation are encouraged. Presenters in this session will be considered for the SIGMAA on Statistics Education's Best Contributed Paper Award.

Handheld Technology in Content and Methods Courses for Prospective Teachers with a Special Interest Strand Devoted to Teaching and Learning Geometry (MAA CP Y1), Saturday afternoon; **Charles Vonder Embse***, Central Michigan University (vonde1cb@cmich.edu); **Deborah A. Crocker**, Appalachian State University; **Gregory D. Foley**, The Liberal Arts and Science Academy of Austin at Lyndon B. Johnson High School; and **Stephen F. West**, SUNY Geneseo. Technology has significantly changed the way we teach and learn mathematics at both the school and collegiate levels. Various types of handheld technology are increasingly used in nearly all mathematics and mathematics education courses for prospective teachers of mathematics in both elementary- and secondary-level programs. In particular, interactive, dynamic geometry software for handheld graphing calculators has changed the basic way that mathematics is taught from a didactic, rigidly structured approach to an exploratory and investigative journey of discovery. State and national curriculum standards specify that geometry be an integral part of school mathematics programs from kindergarten through grade 12. As a result, geometry units and courses are a critical part of the mathematical development for preservice teachers. This session seeks papers on promising practices and research involving the use of handheld technology with prospective teachers of mathematics in grades K–12. A strand of the session will be devoted to papers on handheld technology in geometry courses for preservice teachers. Papers may concern handheld technology use in mathematics content courses or mathematics methods courses.

Models That Work: Building Diversity in Advanced Mathematics (MAA CP Y3), Sunday morning; **Abbe H. Herzig***, University at Albany, SUNY (aherzig@albany.edu), and **Patricia Hale**, California State Polytechnic University, Pomona. The goal of this contributed paper session is to present to the mathematics community models of programs that have been successful at supporting diverse groups of people (women of all races and African Americans, Latinos and Chicanos, and Native Americans) in their pursuit of advanced mathematics study and careers. We believe that it is important to examine this question holistically, across the span of the educational pathway, since issues of diversity need to be addressed at every educational and professional juncture. Consequently, we seek proposals for presentations that will describe successful programs for postdoctoral (faculty), graduate, undergraduate, or precollege students. We interpret "success" broadly and are looking for ideas that should be shared with others in the mathematics community as models for promoting diversity across the educational spectrum. These might be academic or extracurricular programs that have targeted any group of people traditionally underrepresented in the mathematical sciences. Historical perspectives are also welcome. This session is jointly sponsored by the MAA Committee on the Participation of Women and the MAA Committee on the Participation of Minorities.

Strategies to Encourage Persistence in Mathematics (MAA CP Y5), Sunday morning; **David C. Carothers***, James Madison University (carothdc@jmu.edu); **Ahmed I. Zayed**, DePaul University; and **Keith E. Mellinger**, University of Mary Washington. Enrollments in advanced mathematics courses have declined in recent years, as shown by CBMS surveys. This has happened at a time when more than ever students majoring in many different disciplines would benefit from more mathematics. The CUPM curriculum guide also recognizes that mathematics departments should seek to enroll more students from the physical and life sciences, computer science, engineering, business, and many other disciplines in advanced mathematics courses while at the same time recruiting mathematics and statistics majors. This session will explore strategies to encourage students to persist in mathematics beyond introductory or required courses. Speakers are invited to present teaching and other strategies that have been successful in increasing the number of students who continue on to additional advanced courses after beginning calculus, statistics, or other introductory courses. This session is sponsored by the MAA Committee on the Teaching of Undergraduate Mathematics (CTUM).

Introductory Actuarial Science Programs (MAA CP Y7), Sunday morning; **Robert E. Buck***, Slippery Rock University (robert.buck@sru.edu). Multiple changes in the SOA/CAS exam structure over the past several years have impacted heavily on schools with actuarial science programs, particularly those institutions with small

introductory programs. With another exam restructuring in 2005, as well as increased interest in the field, it would be useful to share responses to the situation. This session invites papers outlining how departments have adjusted their programs to respond to these changes as well as papers detailing the type of programs offered. Of principal interest are papers discussing introductory undergraduate actuarial science programs, but papers describing advanced undergraduate actuarial science programs will also be considered. This session will be of special interest both to departments with existing actuarial programs and those considering such programs.

General Session (MAA CP Z1), Thursday, Friday, Saturday, Sunday mornings and afternoons; **Stephen Davis***, Davidson College (stdavis@davidson.edu), and **Eric Marland**, Appalachian State University. Papers may be presented on any mathematical topic. Papers that fit into one of the other sessions should be sent to that organizer, not to this session.

Submission Procedures for MAA Contributed Papers

Send your abstract directly to the AMS (abstracts should not be sent to the organizer(s)). Participants may speak in at most two MAA contributed paper sessions. If your paper cannot be accommodated in the session for which it was submitted, it will be automatically considered for the general session. Speakers in the general session will be limited to one talk because of time constraints. Abstracts must reach the AMS by Tuesday, September 28, 2005.

The AMS will publish abstracts for the talks in the MAA sessions. Abstracts must be submitted electronically to the AMS. No knowledge of LaTeX is necessary; however, LaTeX and AMS-LaTeX are the only typesetting systems that can be used if mathematics is included. The abstracts submissions page is at http://www.ams.org/cgi-bin/abstracts/abstract.pl. Simply fill in each field as instructed. Submitters will be able to view their abstracts before final submission. Upon completion of your submission, your unique abstract number will immediately be sent to you. All questions concerning the submission of abstracts should be addressed to abs-coord@ams.org.

Miami, Florida

Florida International University

April 1–2, 2006

Saturday – Sunday

Meeting #1015

Southeastern Section
Associate secretary: Matthew Miller
Announcement issue of *Notices*: December 2005
Program first available on AMS website: February 16, 2006
Program issue of electronic *Notices*: April 2006
Issue of *Abstracts*: Volume 27, Issue 2

Deadlines

For organizers: September 1, 2005
For consideration of contributed papers in Special Sessions: December 13, 2005
For abstracts: February 7, 2006

Notre Dame, Indiana

University of Notre Dame

April 8–9, 2006

Saturday – Sunday

Meeting #1016

Central Section
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: December 2005
Program first available on AMS website: February 23, 2006
Program issue of electronic *Notices*: April 2006
Issue of *Abstracts*: Volume 27, Issue 2

Deadlines

For organizers: September 9, 2005
For consideration of contributed papers in Special Sessions: December 20, 2005
For abstracts: February 14, 2006

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Special Sessions

Combinatorial Algebraic Geometry (Code: SS 2A), **Juan C. Migliore**, University of Notre Dame, and **Uwe R. Nagel**, University of Kentucky.

Commutative Algebra (Code: SS 1A), **Alberto Corso**, University of Kentucky, **Claudia Polini**, University of Notre Dame, and **Bernd Ulrich**, Purdue University.

Ergodic Theory (Code: SS 3A), **Nikos Frantzikinakis**, Pennsylvania State University, **Bryna R. Kra**, Northwestern University, and **Mate Wierdl**, University of Memphis.

Durham, New Hampshire

University of New Hampshire

April 22–23, 2006

Saturday – Sunday

Meeting #1017

Eastern Section
Associate secretary: Lesley M. Sibner
Announcement issue of *Notices*: January 2006
Program first available on AMS website: March 9, 2006

Program issue of electronic *Notices*: April 2006
Issue of *Abstracts*: Volume 27, Issue 2

Deadlines

For organizers: September 22, 2005
For consideration of contributed papers in Special Sessions: January 3, 2006
For abstracts: February 28, 2006

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Ailana M. Fraser, University of British Columbia, *Title to be announced.*

Dmitri Nikshych, University of New Hampshire, *Title to be announced.*

Florian Pop, University of Pennsylvania, *Title to be announced.*

Konstantina Trivisa, University of Maryland, College Park, *Title to be announced.*

Special Sessions

Discrete and Convex Geometry (Code: SS 1A), **Daniel A. Klain**, University of Massachusetts (Lowell), **Barry R. Monson**, University of New Brunswick, and **Egon Schulte**, Northeastern University.

San Francisco, California

San Francisco State University

April 29–30, 2006

Saturday – Sunday

Meeting #1018

Western Section
Associate secretary: Michel L. Lapidus
Announcement issue of *Notices*: January 2006
Program first available on AMS website: March 16, 2006
Program issue of electronic *Notices*: April 2006
Issue of *Abstracts*: Volume 27, Issue 2

Deadlines

For organizers: September 30, 2005
For consideration of contributed papers in Special Sessions: January 10, 2006
For abstracts: March 7, 2006

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

Lincoln Chayes, University of California Los Angeles, *Title to be announced.*

C. Robin Graham, University of Washington, *Title to be announced.*

Vadim Kaloshin, California Institute of Technology, *Title to be announced.*

Yuval Peres, University of California Berkeley, *Title to be announced.*

Special Sessions

History and Philosophy of Mathematics (Code: SS 1A), **Shawnee L. McMurran**, California State University, San Bernardino, and **James J. Tattersall**, Providence College.

Salt Lake City, Utah

University of Utah

October 7–8, 2006

Saturday – Sunday

Meeting #1019

Western Section
Associate secretary: Michel L. Lapidus
Announcement issue of *Notices*: July 2006
Program first available on AMS website: August 24, 2006
Program issue of electronic *Notices*: October 2006
Issue of *Abstracts*: Volume 27, Issue 3

Deadlines

For organizers: March 7, 2006
For consideration of contributed papers in Special Sessions: June 20, 2006
For abstracts: August 15, 2006

The scientific information listed below may be dated. For the latest information, see www.ams.org/amsmtgs/sectional.html.

Invited Addresses

William Arveson, University of California Berkeley, *Title to be announced.*

Alexei Borodin, California Institute of Technology, *Title to be announced.*

Izabella Joanna Laba, University of British Columbia, *Title to be announced.*

Darren Long, University of California Santa Barbara, *Title to be announced.*

Special Sessions

Harmonic Analysis: Trends and Perspectives (Code: SS 1A), **Alex Iosevich**, University of Missouri, and **Michael T. Lacey**, Georgia Institute of Technology.

Cincinnati, Ohio

University of Cincinnati

October 21–22, 2006
Saturday – Sunday

Meeting #1020
Central Section
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: July 2006
Program first available on AMS website: September 7, 2006
Program issue of electronic *Notices*: October 2006
Issue of *Abstracts*: Volume 27, Issue 3

Deadlines
For organizers: March 21, 2006
For consideration of contributed papers in Special Sessions: July 5, 2006
For abstracts: August 29, 2006

Storrs, Connecticut

University of Connecticut

October 28–29, 2006
Saturday – Sunday

Meeting #1021
Eastern Section
Associate secretary: Lesley M. Sibner
Announcement issue of *Notices*: July 2006
Program first available on AMS website: September 14, 2006
Program issue of electronic *Notices*: October 2006
Issue of *Abstracts*: Volume 27, Issue 4

Deadlines
For organizers: March 28, 2006
For consideration of contributed papers in Special Sessions: July 11, 2006
For abstracts: September 6, 2006

Fayetteville, Arkansas

University of Arkansas

November 3–4, 2006
Friday – Saturday

Meeting #1022
Southeastern Section
Associate secretary: Matthew Miller
Announcement issue of *Notices*: September 2006
Program first available on AMS website: September 21, 2006
Program issue of electronic *Notices*: November 2006
Issue of *Abstracts*: Volume 27, Issue 4

Deadlines
For organizers: April 3, 2006
For consideration of contributed papers in Special Sessions: July 18, 2006
For abstracts: September 12, 2006

New Orleans, Louisiana

New Orleans Marriott and Sheraton New Orleans Hotel

January 4–7, 2007
Thursday – Sunday

Meeting #1023
Joint Mathematics Meetings, including the 113th Annual Meeting of the AMS, 90th Annual 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), with sessions contributed by the Society for Industrial and Applied Mathematics (SIAM).
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: October 2006
Program first available on AMS website: November 1, 2006
Program issue of electronic *Notices*: January 2007
Issue of *Abstracts*: Volume 28, Issue 1

Deadlines
For organizers: April 1, 2006
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

Davidson, North Carolina

Davidson College

March 3–4, 2007
Saturday – Sunday
Southeastern Section
Associate secretary: Matthew Miller
Announcement issue of *Notices*: To be announced
Program first available on AMS website: To be announced
Program issue of electronic *Notices*: To be announced
Issue of *Abstracts*: To be announced

Deadlines
For organizers: August 3, 2006
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

Oxford, Ohio

Miami University

March 16–17, 2007
Friday – Saturday
Central Section
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: To be announced
Program first available on AMS website: 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

San Diego, California

San Diego Convention Center

January 6–9, 2008
Sunday – Wednesday
Joint Mathematics Meetings, including the 114th Annual Meeting of the AMS, 91st Annual 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: Michel L. Lapidus
Announcement issue of *Notices*: October 2007
Program first available on AMS website: November 1, 2007
Program issue of electronic *Notices*: January 2008
Issue of *Abstracts*: Volume 29, Issue 1

Deadlines
For organizers: April 1, 2007
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

Washington, District of Columbia

Marriott Wardman Park Hotel and Omni Shoreham Hotel

January 7–10, 2009
Wednesday – Saturday
Joint Mathematics Meetings, including the 115th Annual Meeting of the AMS, 92nd Annual 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 2008
Program first available on AMS website: November 1, 2008
Program issue of electronic *Notices*: January 2009
Issue of *Abstracts*: Volume 30, Issue 1

Deadlines
For organizers: April 1, 2008
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

San Francisco, California

Moscone Center West and the San Francisco Marriott

January 6–9, 2010
Wednesday – Saturday
Joint Mathematics Meetings, including the 116th Annual Meeting of the AMS, 93rd Annual 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: Matthew Miller
Announcement issue of *Notices*: October 2009
Program first available on AMS website: November 1, 2009
Program issue of electronic *Notices*: January 2010
Issue of *Abstracts*: Volume 31, Issue 1

Deadlines
For organizers: April 1, 2009
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced

New Orleans, Louisiana

New Orleans Marriott and Sheraton New Orleans Hotel

January 5–8, 2011

Wednesday – Saturday
Joint Mathematics Meetings, including the 117th Annual Meeting of the AMS, 94th Annual Meeting of the Mathematical Association of America (MAA), annual meetings of the Association for Women in Mathematics (AWM) and the National Association of Mathematicians (NAM), and the winter meeting of the Association for Symbolic Logic (ASL).
Associate secretary: Susan J. Friedlander
Announcement issue of *Notices*: October 2010
Program first available on AMS website: November 1, 2010
Program issue of electronic *Notices*: January 2011
Issue of *Abstracts*: Volume 32, Issue 1

Deadlines

For organizers: April 2, 2011
For consideration of contributed papers in Special Sessions: To be announced
For abstracts: To be announced