



San Antonio Timetable

San Antonio ★ Texas

January 13-16, 1999

NOTE: CC = Henry B. Gonzales Convention Center

M O N D A Y , J A N U A R Y 1 1

- 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON NONLINEAR CONTROL**, Salon del Rey North, Hilton Palacio del Rio
- 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE ON MATHEMATICS IN FINANCE**, Salon del Rey Central, Hilton Palacio del Rio

T U E S D A Y , J A N U A R Y 1 2

- 8:30 a.m. — 4:00 p.m. **MAA BOARD OF GOVERNORS**, Salon del Rey South, Hilton Palacio del Rio
- 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON NONLINEAR CONTROL**, Salon del Rey North, Hilton Palacio del Rio
- 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE ON MATHEMATICS IN FINANCE**, Salon del Rey Central, Hilton Palacio del Rio
- 1:00 p.m. — 10:00 p.m. **AMS COUNCIL**, El Mirador, Hilton Palacio del Rio
- 3:00 p.m. — 7:00 p.m. **JOINT MEETINGS REGISTRATION**, South Exhibit Hall, CC
- 5:30 p.m. — 10:00 p.m. **MATHCHATS AND GRADUATE STUDENT RECEPTION**

W E D N E S D A Y , J A N U A R Y 1 3

- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**, South Exhibit Hall, CC
- 7:30 a.m. — 4:00 p.m. **MATHEMATICAL SCIENCES EMPLOYMENT REGISTER REGISTRATION** *Open for receipt of all interview request forms (forms accepted between 9:30 a.m. and 4:00 p.m.; none accepted on Thursday or Friday), South Exhibit Hall, CC*
- 8:00 a.m. — 10:55 a.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, I**
- 8:00 a.m. — 10:55 a.m. **AMS-ASL SPECIAL SESSION ON MODEL THEORY AND ITS APPLICATIONS, I**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Banach Spaces of Holomorphic Functions and Operators on These Spaces, I*
- 8:00 a.m. — 10:55 a.m. *Commutative Algebra, I*
- 8:00 a.m. — 10:55 a.m. *Combinatorial Topology, I*
- 8:00 a.m. — 10:55 a.m. *Development of Electronic Communications in Mathematics, I*
- 8:00 a.m. — 10:55 a.m. *The Functional and Harmonic Analysis of Wavelets, I*
- 8:00 a.m. — 10:55 a.m. *Discrete Models and Difference Equations, I*
- 8:00 a.m. — 10:55 a.m. *Mathematics Education and Mistaken Philosophies of Mathematics, I*
- 8:00 a.m. — 10:55 a.m. *Recent Developments in Differential Geometry, I*
- 8:00 a.m. — 10:55 a.m. *Singularities in Algebraic and Analytic Geometry, I*
- 8:00 a.m. — 10:55 a.m. *Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry, I*
- 8:00 a.m. — 10:00 a.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #1: PART A** *Mathematics, calculus, and modeling using the TI-92.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #3: PART A** *Developing materials for liberal arts mathematics that use elementary graph theory and emphasize applications to everyday experience.*

- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #4: PART A** *The mathematics of the perfect shuffle.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *The Use of Technology in Teaching Abstract Mathematics, I*
 8:00 a.m. — 10:55 a.m. *Quantitative Literacy, I*
 8:00 a.m. — 10:55 a.m. *Teaching Statistics: Teaching the Reasoning and New Technological Tools, I*
 8:00 a.m. — 10:55 a.m. *Mathematics Competitions, I*
- 8:00 a.m. — 9:20 a.m. **MAA COMMITTEE ON THE PROFESSION PANEL DISCUSSION** *A dean's view of mathematics departments.*
- 8:00 a.m. — 10:55 a.m. **MAA SPECIAL PRESENTATION** *The use of history in the teaching of mathematics.*
- 10:05 a.m. — 10:55 a.m. **AMS INVITED ADDRESS** *Geometry of soliton equations.* **Chuu-Lian Terng**
- 11:10 a.m. — noon **AMS-MAA INVITED ADDRESS** *Title to be announced.* **Jennifer Tour Chayes**
- noon — 5:00 p.m. **BOOKS SALES AND EXHIBITS**, South Exhibit Hall, CC
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE I** *Symplectic geometry from a dynamical systems point of view: Part 1.* **Helmut Hofer**
- 2:15 p.m. — 3:05 p.m. **MAA INVITED ADDRESS** *Extending and generalizing the Pascal Triangle: An interplay of algebra and geometry.* **Jean Pedersen**
- 2:15 p.m. — 6:00 p.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, II**
- 2:15 p.m. — 6:00 p.m. **AMS-ASL SPECIAL SESSION ON MODEL THEORY AND ITS APPLICATIONS, II**
- AMS SPECIAL SESSIONS**
- 2:15 p.m. — 6:00 p.m. *Banach Spaces of Holomorphic Functions and Operators on These Spaces, II*
 2:15 p.m. — 6:00 p.m. *Commutative Algebra, II*
 2:15 p.m. — 6:00 p.m. *Combinatorial Topology, II*
 2:15 p.m. — 6:00 p.m. *Development of Electronic Communications in Mathematics, II*
 2:15 p.m. — 6:00 p.m. *The Functional and Harmonic Analysis of Wavelets, II*
 2:15 p.m. — 6:00 p.m. *Discrete Models and Difference Equations, II*
 2:15 p.m. — 6:00 p.m. *Mathematics Education and Mistaken Philosophies of Mathematics, II*
 2:15 p.m. — 6:00 p.m. *Recent Developments in Differential Geometry, II*
 2:15 p.m. — 6:00 p.m. *Singularities in Algebraic and Analytic Geometry, II*
 2:15 p.m. — 6:00 p.m. *Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry, II*
- 2:15 p.m. — 6:00 p.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #10: PART A** *Facilitating active learning: Concrete ways to foster student participation.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #13: PART A** *Getting students involved in undergraduate research.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #2: PART A** *Mathematical finance.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #8: PART A** *Teaching a course in the history of mathematics.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 2:15 p.m. — 6:15 p.m. *Innovations in Teaching Abstract Algebra*
 2:15 p.m. — 6:15 p.m. *Ethical, Humanistic, and Artistic Mathematics, I*
- 3:20 p.m. — 4:10 p.m. **MAA INVITED ADDRESS** *The symmetries of things: Real and conceptual.* **John H. Conway**
- 3:20 p.m. — 4:20 p.m. **AWM PANEL DISCUSSION**
- 4:20 p.m. — 4:50 p.m. **AWM BUSINESS MEETING**
- 4:30 p.m. — 6:30 p.m. **MAA MINICOURSE #1: PART B** *Mathematics, calculus, and modeling using the TI-92.*
- 4:30 p.m. — 6:30 p.m. **MAA MINICOURSE #3: PART B** *Developing materials for liberal arts mathematics that use elementary graph theory and emphasize applications to everyday experience.*

W E D N E S D A Y , J A N U A R Y 1 3 (C O N T ' D)

- 4:30 p.m. — 6:30 p.m. **MAA MINICOURSE #5: PART A** *Building custom classroom capsules with Maple programming.*
- 4:30 p.m. — 6:30 p.m. **MAA MINICOURSE #7: PART A** *Finding motivation for upper division mathematics through original sources.*
- 4:30 p.m. — 6:00 p.m. **AMS COMMITTEE ON THE PROFESSION PANEL DISCUSSION**
- 4:30 p.m. — 6:30 p.m. **MAA SECTION OFFICERS**
- 6:00 p.m. — 7:00 p.m. **RECEPTION FOR FIRST-TIME PARTICIPANTS**
- 7:00 p.m. — 8:00 p.m. **MAA DRAMATIC PRESENTATION** *The mathematics of Lewis Carroll.*
- 7:15 p.m. — 8:15 p.m. **YOUNG MATHEMATICIANS NETWORK DISCUSSION** *Concerns of young mathematicians: A town meeting.*
- 8:30 p.m. — 9:30 p.m. **AMS JOSIAH WILLARD GIBBS LECTURE** *We got rhythm: Dynamical systems of the nervous system.* **Nancy J. Kopell**
- 9:30 p.m. — 11:00 p.m. **AWM RECEPTION**

T H U R S D A Y , J A N U A R Y 1 4

- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**, South Exhibit Hall, CC
- 8:00 a.m. — noon **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, III**
- 8:00 a.m. — noon **AMS-ASL SPECIAL SESSION ON MODEL THEORY AND ITS APPLICATIONS, III**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — noon *Banach Spaces of Holomorphic Functions and Operators on These Spaces, III*
- 8:00 a.m. — noon *Commutative Algebra, III*
- 8:00 a.m. — noon *Combinatorial Topology, III*
- 8:00 a.m. — noon *Development of Electronic Communications in Mathematics, III*
- 8:00 a.m. — noon *The Functional and Harmonic Analysis of Wavelets, III*
- 8:00 a.m. — noon *Discrete Models and Difference Equations, III*
- 8:00 a.m. — noon *Mathematics Education and Mistaken Philosophies of Mathematics, III*
- 8:00 a.m. — noon *Recent Developments in Differential Geometry, III*
- 8:00 a.m. — noon *Singularities in Algebraic and Analytic Geometry, III*
- 8:00 a.m. — noon *Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry, III*
- 8:00 a.m. — noon. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #2: PART B** *Mathematical finance.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #8: PART B** *Teaching a course in the history of mathematics.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — noon *Geometry in the Classroom in the Next Millennium, I*
- 8:00 a.m. — 10:55 a.m. *Discrete Mathematics Revisited, I*
- 8:00 a.m. — 10:00 a.m. **MAA WOMEN AND MATHEMATICS NETWORK POSTER SESSION** *Outreach programs for women and girls in mathematics.*
- 8:00 a.m. — 9:30 a.m. **PROJECT NEXT-YOUNG MATHEMATICIANS NETWORK PANEL DISCUSSION** *Summer research opportunities for faculty in industry and government.*
- 8:15 a.m. — 7:30 p.m. **MATHEMATICAL SCIENCES EMPLOYMENT REGISTER** *Interviews only*, South Exhibit Hall, CC
- 9:00 a.m. — 9:50 a.m. **AWM EMMY NOETHER LECTURE** *Aperiodic dynamical systems.* **Krystyna M. Kuperberg**
- 9:30 a.m. — 5:30 p.m. **BOOKS SALES AND EXHIBITS**, South Exhibit Hall, CC
- 10:05 a.m. — 10:55 a.m. **MAA INVITED ADDRESS** *The history of mathematics and its future.* **John Fauvel**
- 10:15 a.m. — 12:15 p.m. **MAA MINICOURSE #13: PART B** *Getting students involved in undergraduate research.*
- 10:15 a.m. — 12:15 p.m. **MAA MINICOURSE #4: PART B** *The mathematics of the perfect shuffle.*

- 10:15 a.m. — 12:15 p.m. **MAA MINICOURSE #5: PART B** *Building custom classroom capsules with Maple programming.*
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE II** *Symplectic geometry from a dynamical systems point of view: Part 2.* Helmut Hofer
- 2:15 p.m. — 4:10 p.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, IV**
- 2:15 p.m. — 4:10 p.m. **AMS-ASL SPECIAL SESSION ON MODEL THEORY AND ITS APPLICATIONS, IV**
- AMS SPECIAL SESSIONS**
- 2:15 p.m. — 4:10 p.m. *Banach Spaces of Holomorphic Functions and Operators on These Spaces, IV*
- 2:15 p.m. — 4:10 p.m. *Commutative Algebra, IV*
- 2:15 p.m. — 4:10 p.m. *Combinatorial Topology, IV*
- 2:15 p.m. — 4:10 p.m. *Development of Electronic Communications in Mathematics, IV*
- 2:15 p.m. — 4:10 p.m. *The Functional and Harmonic Analysis of Wavelets, IV*
- 2:15 p.m. — 4:10 p.m. *Discrete Models and Difference Equations, IV*
- 2:15 p.m. — 4:10 p.m. *Mathematics Education and Mistaken Philosophies of Mathematics, IV*
- 2:15 p.m. — 4:10 p.m. *Recent Developments in Differential Geometry, IV*
- 2:15 p.m. — 4:10 p.m. *Singularities in Algebraic and Analytic Geometry, IV*
- 2:15 p.m. — 4:10 p.m. *Hamiltonian Mechanics: Applications to Celestial Mechanics and Chemistry, IV*
- 2:15 p.m. — 6:00 p.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #12: PART A** *Writing and the teaching of mathematics.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #16: PART A** *Using hand-held CAS throughout the mathematics curriculum.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #7: PART B** *Finding motivation for upper division mathematics through original sources.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #9: PART A** *Exploring abstract algebra through interactive labs.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 2:15 p.m. — 4:10 p.m. *Mathematics Competitions, II*
- 2:15 p.m. — 4:10 p.m. *Projects That Work in Applied Mathematics Courses, I*
- 2:15 p.m. — 4:10 p.m. *Innovative Use of Distance Learning Techniques to Teach Post-Secondary Mathematics, I*
- 2:15 p.m. — 4:10 p.m. *Integrating Mathematics and Other Disciplines, I*
- 2:15 p.m. — 3:45 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *College algebra reform.*
- 2:15 p.m. — 3:45 p.m. **MAA PANEL DISCUSSION** *Discovery-based teaching of undergraduate mathematics courses.*
- 2:15 p.m. — 3:45 p.m. **MAA COMMITTEE ON THE PARTICIPATION OF WOMEN PANEL DISCUSSION** *Exemplary women in mathematical careers.*
- 2:15 p.m. — 3:45 p.m. **ASA-MAA COMMITTEE ON STATISTICS PANEL DISCUSSION** *Involving undergraduate students in industrial consulting experiences.*
- 2:15 p.m. — 4:10 p.m. **MAA COMMITTEE ON COMPUTERS IN MATHEMATICS EDUCATION POSTER SESSION** *Using the Web in teaching undergraduate mathematics.*
- 2:15 p.m. — 3:45 p.m. **MAA COMMITTEE ON COMPUTERS IN MATHEMATICS EDUCATION PANEL DISCUSSION** *Using the Web as a tool for teaching calculus: What we've learned; successes and problem areas.*
- 3:20 p.m. — 4:10 p.m. **AMS INVITED ADDRESS** *Midpoints.* Alan D. Weinstein
- 4:25 p.m. — 6:00 p.m. **JOINT PRIZE SESSION AND RECEPTION**
- 5:45 p.m. — 7:00 p.m. **MAA RECEPTION FOR TWO-YEAR COLLEGES**
- 6:30 p.m. — 10:00 p.m. **MER BANQUET**
- 7:00 p.m. — 9:00 p.m. **MAA-ARUME SPECIAL PRESENTATION** *Research on undergraduate mathematics education.*

T H U R S D A Y , J A N U A R Y 1 4 (C O N T ' D)

- 7:00 p.m. — 9:00 p.m. **MAA COMMITTEE ON THE MATHEMATICAL EDUCATION OF TEACHERS POSTER SESSION** *Innovations in mathematics programs which benefit future teachers.*
- 7:00 p.m. — 8:30 p.m. **MAA-YOUNG MATHEMATICIANS NETWORK PANEL DISCUSSION** *Solving the two body problem.*
- 7:30 p.m. — 9:00 p.m. **MAA MUSICAL PRESENTATION** *Eine Kleine (Mathematische) Nachtmusik.*
- 7:30 p.m. — 9:00 p.m. **MAA SPECIAL PRESENTATION** *Student reports: Explorations in using the World Wide Web to enhance the teaching of mathematics.*

F R I D A Y , J A N U A R Y 1 5

- 7:00 a.m. — 8:00 a.m. **JOINT PI MU EPSILON AND MAA STUDENT CHAPTER ADVISORS' BREAKFAST**
- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**, South Exhibit Hall, CC
- AMS-MAA SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Research in Mathematics by Undergraduates, I*
- 8:00 a.m. — 10:55 a.m. *The History of Mathematics, I*
- 8:00 a.m. — 10:55 a.m. **AMS-AWM SPECIAL SESSION ON GEOMETRY IN DYNAMICS, I**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Several Complex Variables, I*
- 8:00 a.m. — 10:50 a.m. *Bergman Spaces and Related Topics, I*
- 8:00 a.m. — 10:55 a.m. *Probabilistic Combinatorics, I*
- 8:00 a.m. — 10:55 a.m. *Dynamical, Spectral, and Arithmetic Zeta-Functions, I*
- 8:00 a.m. — 10:50 a.m. *Commutative Algebra and Algebraic Geometry, I*
- 8:00 a.m. — 10:55 a.m. *Operator Algebras and Applications, I*
- 8:00 a.m. — 10:55 a.m. *Computational Algebraic Geometry for Curves and Surfaces, I*
- 8:00 a.m. — 10:55 a.m. *The Mathematics of the Navier-Stokes Equations, I*
- 8:00 a.m. — 10:55 a.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #10: PART B** *Facilitating active learning: Concrete ways to foster student participation.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #9: PART B** *Exploring abstract algebra through interactive labs.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *The Use of Technology in Teaching Abstract Mathematics, II*
- 8:00 a.m. — 10:55 a.m. *Quantitative Literacy, II*
- 8:00 a.m. — 10:55 a.m. *Teaching Statistics: Teaching the Reasoning and New Technological Tools, II*
- 8:00 a.m. — 10:55 a.m. *The Integral Role of the Two-Year College in the Preservice Preparation of Elementary School Teachers, I*
- 8:00 a.m. — 9:20 a.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS-NSF PANEL DISCUSSION** *Forming the crystal ball for calculus.*
- 8:00 a.m. — 9:20 a.m. **MAA COMMITTEE ON TWO-YEAR COLLEGES PANEL DISCUSSION** *Dual credit for mathematics courses taken in high school.*
- 8:00 a.m. — 10:50 a.m. **MAA PANEL DISCUSSION** *Innovations in teaching assistant training.*
- 8:00 a.m. — 10:00 a.m. **PROJECT NEXT-YOUNG MATHEMATICIANS NETWORK POSTER SESSION**
- 8:15 a.m. — 7:30 p.m. **MATHEMATICAL SCIENCES EMPLOYMENT REGISTER** *Interviews only*, South Exhibit Hall, CC
- 8:30 a.m. — 9:30 a.m. **AMS PRESENTATION** *e-MATH on the World Wide Web.*
- 9:00 a.m. — 9:50 a.m. **AMS INVITED ADDRESS** *Title to be announced.* **Sorin Popa**

- 9:30 a.m. — 5:30 p.m. **BOOK SALES AND EXHIBITS**, South Exhibit Hall, CC
- 9:35 a.m. — 10:55 a.m. **MAA COMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *The effect of calculus reform on student performance in subsequent courses.*
- 9:35 a.m. — 10:55 a.m. **MAA OPEN FORUM** *Educational Testing Service: Testing with technology—Sharing ideas to meet the challenges that lie ahead.*
- 9:35 a.m. — 10:55 a.m. **MAA-AMS-NCTM PANEL DISCUSSION** *The draft of the updated NCTM standards for school mathematics: An opportunity for your feedback.*
- 10:00 a.m. — 10:55 a.m. **AMS PRESENTATION** *Math e-journals and beyond.*
- 11:10 a.m. — noon **AMS-MAA INVITED ADDRESS** *Massive graphs: Algorithms, applications, and open problems.*
Joan Feigenbaum
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE III** *Symplectic geometry from a dynamical systems point of view: Part 3.* **Helmut Hofer**
- 1:00 p.m. — 6:00 p.m. **AMS-MAA SPECIAL SESSION**
The History of Mathematics, II
- 1:00 p.m. — 6:00 p.m. **AMS-AWM SPECIAL SESSION ON GEOMETRY IN DYNAMICS, II**
- AMS SPECIAL SESSIONS**
- 1:00 p.m. — 6:00 p.m. *Several Complex Variables, II*
- 1:00 p.m. — 6:00 p.m. *Bergman Spaces and Related Topics, II*
- 1:00 p.m. — 6:00 p.m. *Probabilistic Combinatorics, II, Fiesta A, CC*
- 1:00 p.m. — 6:00 p.m. *Dynamical, Spectral, and Arithmetic Zeta-Functions, II*
- 1:00 p.m. — 6:00 p.m. *Commutative Algebra and Algebraic Geometry, II*
- 1:00 p.m. — 6:00 p.m. *Operator Algebras and Applications, II*
- 1:00 p.m. — 6:00 p.m. *Computational Algebraic Geometry for Curves and Surfaces, II*
- 1:00 p.m. — 6:00 p.m. *The Mathematics of the Navier-Stokes Equations, II*
- 1:00 p.m. — 6:00 p.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #11: PART A** *Creating interactive texts in Mathematica.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #12: PART B** *Writing and the teaching of mathematics.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #6: PART A** *Cooperative learning in undergraduate mathematics education.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 1:00 p.m. — 3:00 p.m. *Ethical, Humanistic, and Artistic Mathematics, II*
- 1:00 p.m. — 6:00 p.m. *Proof in Mathematical Education*
- 1:00 p.m. — 5:00 p.m. **ASL SESSION**
- 1:00 p.m. — 3:00 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS POSTER SESSION** *College algebra reform.*
- 2:15 p.m. — 3:05 p.m. **MAA INVITED ADDRESS** *The role of research in improving school mathematics.* **Jeremy Kilpatrick**
- 2:15 p.m. — 5:00 p.m. **NAM GRANVILLE-BROWN SESSION OF PRESENTATIONS BY RECENT DOCTORAL RECIPIENTS IN THE MATHEMATICAL SCIENCES**
- 2:15 p.m. — 4:10 p.m. **RMMC BOARD OF DIRECTORS**
- 2:30 p.m. — 4:00 p.m. **AMS COMMITTEE ON SCIENCE POLICY PANEL DISCUSSION**
- 3:15 p.m. — 5:15 p.m. **MAA MINICOURSE #14: PART A** *An introduction to wavelets.*
- 3:15 p.m. — 5:15 p.m. **MAA MINICOURSE #15: PART A** *Music and mathematics.*
- 3:15 p.m. — 4:45 p.m. **MAA PANEL DISCUSSION** *Models for intervention projects.*

FRIDAY, JANUARY 15 (CONT'D)

- 3:20 p.m. — 5:00 p.m. **MAA TEACHING AWARDS PRESENTATIONS**
- 4:00 p.m. — 7:00 p.m. **MAA POSTER SESSION** *Undergraduate research by students.*
- 4:20 p.m. — 5:10 p.m. **AMS COMMITTEE ON SCIENCE POLICY GOVERNMENT SPEAKER** *Title to be announced.*
Rita Colwell
- 5:00 p.m. — 7:00 p.m. **MAA INFORMAL SESSION** *Actuarial education.*
- 5:30 p.m. — 8:30 p.m. **NAM BANQUET AND COX-TALBOT ADDRESS** *The end of one era, the dawn of another.*
Johnny L. Houston
- 6:00 p.m. — 7:00 p.m. **AMS SPECIAL EVENT** *Mathematical Reviews reception.*
- 7:00 p.m. — 9:00 p.m. **MAA-ARUME SPECIAL PRESENTATION** *Research on undergraduate mathematics education.*
- 7:00 p.m. — 9:00 p.m. **MAA FORMAL DISCUSSION** *Isolated teachers of statistics.*
- 7:15 p.m. — 9:15 p.m. **MAA PRESENTATION** *An evening of poetry.*
- 7:30 p.m. — 8:20 p.m. **MAA STUDENT LECTURE** *Pianos and continued fractions.* **Edward G. Dunne**

SATURDAY, JANUARY 16

- 7:30 a.m. — 2:00 p.m. **JOINT MEETINGS REGISTRATION**, South Exhibit Hall, CC
- AMS-MAA SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Research in Mathematics by Undergraduates, II*
- 8:00 a.m. — 10:55 a.m. *The History of Mathematics, III*
- 8:00 a.m. — 10:55 a.m. **AMS-AWM SPECIAL SESSION ON GEOMETRY IN DYNAMICS, III**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Several Complex Variables, III*
- 8:00 a.m. — 10:55 a.m. *Bergman Spaces and Related Topics, III*
- 8:00 a.m. — 10:55 a.m. *Dynamical, Spectral, and Arithmetic Zeta-Functions, III*
- 8:00 a.m. — 10:55 a.m. *Commutative Algebra and Algebraic Geometry, III*
- 8:00 a.m. — 10:55 a.m. *Operator Algebras and Applications, III*
- 8:00 a.m. — 10:55 a.m. *Computational Algebraic Geometry for Curves and Surfaces, III*
- 8:00 a.m. — 10:55 a.m. *The Mathematics of the Navier-Stokes Equations, III*
- 8:00 a.m. — 10:55 a.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #11: PART B** *Creating interactive texts in Mathematica.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #16: PART B** *Using hand-held CAS throughout the mathematics curriculum.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Geometry in the Classroom in the Next Millennium, II*
- 8:00 a.m. — 10:55 a.m. *Discrete Mathematics Revisited, II*
- 8:00 a.m. — 9:20 a.m. **MAA PANEL DISCUSSION** *Life after retirement.*
- 8:00 a.m. — 10:55 a.m. **ASL SESSION**
- 8:30 a.m. — 10:00 a.m. **AMS COMMITTEE ON EDUCATION PANEL DISCUSSION**
- 8:30 a.m. — 10:00 a.m. **MAA-NATIONAL ALLIANCE OF STATE SCIENCE AND MATHEMATICS COALITIONS PANEL DISCUSSION** *State standards.*
- 9:00 a.m. — 9:50 a.m. **MAA INVITED ADDRESS** *Convex polytopes and partially ordered sets.* **Rodica E. Simion**
- 9:00 a.m. — 5:00 p.m. **AWM WORKSHOP**
- 9:00 a.m. — 10:00 a.m. **NAM PANEL DISCUSSION** *Effective networking and research dialogue via*

teleconferences/telecommunication.

- 9:00 a.m. — noon **MATHEMATICAL SCIENCES EMPLOYMENT REGISTER** *Interviews only*, South Exhibit Hall, CC
- 9:00 a.m. — noon **BOOK SALES AND EXHIBITS**, South Exhibit Hall, CC
- 9:30 a.m. — 10:50 a.m. **MAA PRESENTATION** *Planning for retirement.*
- 10:00 a.m. — 10:55 a.m. **NAM BUSINESS MEETING**
- 10:05 a.m. — 10:55 a.m. **MAA INVITED ADDRESS** *Experimental Mathematics: Insight from computation.* **Jonathan M. Borwein**
- 11:10 a.m. — 11:40 a.m. **MAA BUSINESS MEETING**
- 11:45 a.m. — 12:15 p.m. **AMS BUSINESS MEETING**
- 1:00 p.m. — 2:00 p.m. **NAM WILLIAM W.S. CLAYTOR LECTURE** *Maximum cliques and minimum colorings of graphs.*
Earl R. Barnes
- AMS-MAA SPECIAL SESSIONS**
The History of Mathematics, IV
- 1:00 p.m. — 5:00 p.m. **AMS-AWM SPECIAL SESSION ON GEOMETRY IN DYNAMICS, IV**
- AMS SPECIAL SESSIONS**
Several Complex Variables, IV
Bergman Spaces and Related Topics, IV
Dynamical, Spectral, and Arithmetic Zeta-Functions, IV
Commutative Algebra and Algebraic Geometry, IV
Computational Algebraic Geometry for Curves and Surfaces, IV
The Mathematics of the Navier-Stokes Equations, IV
Operator Algebras and Applications, IV
- 1:00 p.m. — 5:00 p.m. **AMS SESSIONS FOR CONTRIBUTED PAPERS**
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #14: PART B** *An introduction to wavelets.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #15: PART B** *Music and mathematics.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #6: PART B** *Cooperative learning in undergraduate mathematics education.*
- MAA CONTRIBUTED PAPER SESSIONS**
Projects That Work in Applied Mathematics Courses, II
Innovative Use of Distance Learning Techniques to Teach Post-Secondary Mathematics, II
Integrating Mathematics and Other Disciplines, II
The Integral Role of the Two-Year College in the Preservice Preparation of Elementary School Teachers, II
- 1:00 p.m. — 2:20 p.m. **MAA COMMITTEE ON THE TEACHING OF UNDERGRADUATE MATHEMATICS PANEL DISCUSSION** *Teaching collaborations between graduate departments, in mathematics at four-year institutions, and community colleges.*
- 1:00 p.m. — 2:20 p.m. **MAA COMMITTEE ON THE MATHEMATICAL EDUCATION OF TEACHERS PANEL DISCUSSION** *Improved teacher preparation: What mathematics departments can do.*
- 1:00 p.m. — 2:20 p.m. **SUMMA SPECIAL PRESENTATION** *Intervention programs for minority precollege students.*
- 1:00 p.m. — 3:00 p.m. **MAA WORKSHOP** *Integrating active learning techniques into lectures.*
- 1:00 p.m. — 5:00 p.m. **ASL SESSION**
- 2:15 p.m. — 3:05 p.m. **AMS INVITED ADDRESS** *Undercompressive shocks in thin film flow.* **Andrea L. Bertozzi**
- 6:30 p.m. — 10:00 p.m. **AMS BANQUET**