



San Diego, California Timetable

San Diego Convention Center
and San Diego Marriott

F R I D A Y , J A N U A R Y 4

- 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON SYMBOLIC DYNAMICS**
 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE ON A SAMPLER OF APPLICATIONS OF GRAPH THEORY**

S A T U R D A Y , J A N U A R Y 5

- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #1: PART A** *Using interactive labs to explore abstract algebra topics.*
 8:30 a.m. — 4:00 p.m. **MAA BOARD OF GOVERNORS**
 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON SYMBOLIC DYNAMICS**
 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE ON A SAMPLER OF APPLICATIONS OF GRAPH THEORY**
 10:30 a.m. — 12:30 p.m. **MAA MINICOURSE #2: PART A** *Mathematical algorithms, models, and graphic representations using spreadsheets.*
 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #1: PART A** *Using interactive labs to explore abstract algebra topics.*
 1:00 p.m. — 10:00 p.m. **AMS COUNCIL**
 3:00 p.m. — 7:00 p.m. **JOINT MEETINGS REGISTRATION**, Exhibit Halls B1 and B2, SDCC
 3:30 p.m. — 5:30 p.m. **MAA MINICOURSE #2: PART A** *Mathematical algorithms, models, and graphic representations using spreadsheets.*

S U N D A Y , J A N U A R Y 6

- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**, Exhibit Halls B1 and B2, SDCC
 7:30 a.m. — 6:00 p.m. **EMPLOYMENT CENTER** *Registration, orientation, and interview center (see article for specific hours)*, Exhibit Halls B1 and B2, SDCC
 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 SET THEORY AND CLASSIFICATION PROBLEM, I**
AMS SPECIAL SESSIONS
 8:00 a.m. — 10:55 a.m. *Symbolic Dynamics, I*
 8:00 a.m. — 10:55 a.m. *Commutative Algebra and Algebraic Geometry, I*
 8:00 a.m. — 10:55 a.m. *Analysis and Application of Quasilinear Partial Differential Equations, I*
 8:00 a.m. — 10:55 a.m. *Computability Theory with Applications, I*
 8:00 a.m. — 10:55 a.m. *Fractal Geometry and Applications: A Jubilee of Benoit Mandelbrot, I*
 8:00 a.m. — 10:55 a.m. *Graph Theory, I*
 8:00 a.m. — 10:55 a.m. *Nonlinear Elliptic Partial Differential Equations, I*
 8:00 a.m. — 10:55 a.m. *Quantum Computation and Information, I*
 8:00 a.m. — 10:55 a.m. *The Theory and Applications of Symmetric Functions, I*
 8:00 a.m. — 10:55 a.m. *Low Dimensional Topology, I*

- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #13: PART A** *Getting students involved in undergraduate research.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #3: PART A** *Optimal use of technology in teaching geometry at the college-university level.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #9: PART A** *The Fibonacci and Catalan numbers.*
- SIAM MINISYMPOSIA**
- 8:00 a.m. — 10:55 a.m. *Optimization for Modeling and Simulation: Theory versus Practice*
- 8:00 a.m. — 10:55 a.m. *Modeling and Simulation for Thin Films*
- 8:00 a.m. — 10:55 a.m. **AMS CONTRIBUTED PAPER SESSIONS**
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *History of Mathematics in the Second Millennium, I*
- 8:00 a.m. — 10:55 a.m. *Mathematics Courses for Teachers, K–12, I*
- 8:00 a.m. — 10:55 a.m. *Integrating Mathematics and Other Disciplines, I*
- 8:00 a.m. — 10:55 a.m. *Innovative Uses of the World Wide Web in Teaching Mathematics, I*
- 8:00 a.m. — 10:55 a.m. *General Contributed Papers, I*
- 9:00 a.m. — 10:30 a.m. **MAA PANEL DISCUSSION** *AP calculus: Bridges and bumps between school and college.*
- 9:00 a.m. — 10:30 a.m. **MAA COMMITTEE ON TWO-YEAR COLLEGES PANEL DISCUSSION** *Teaching at two-year colleges: Rewards, research, resources, and recommendations.*
- 9:00 a.m. — 10:30 a.m. **MAA COMMITTEE ON THE UNDERGRADUATE PROGRAM IN MATHEMATICS PANEL DISCUSSION** *A new CUPM curriculum guide.*
- 10:05 a.m. — 10:55 a.m. **AMS RETIRING PRESIDENTIAL ADDRESS** *Reflections on the future of mathematics.* **Felix E. Browder**
- 11:10 a.m. — noon **AMS-MAA INVITED ADDRESS** *Helicity of vector fields in geometry, biology, and plasma physics.* **Dennis DeTurck**
- 12:00 p.m. — 5:30 p.m. **BOOK SALES AND EXHIBITS**, Exhibit Halls B1 and B2, SDCC
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE I** *Title to be announced.* **L. Craig Evans**
- 2:15 p.m. — 3:05 p.m. **MAA INVITED ADDRESS** *Old math, new math: Using polynomials to gain insight into the design of cryptosystems.* **Susan Landau**
- 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 SET THEORY AND CLASSIFICATION PROBLEM, II**
- AMS SPECIAL SESSIONS**
- 2:15 p.m. — 6:00 p.m. *Symbolic Dynamics, II*
- 2:15 p.m. — 6:00 p.m. *Commutative Algebra and Algebraic Geometry, II*
- 2:15 p.m. — 6:00 p.m. *Analysis and Application of Quasilinear Partial Differential Equations, II*
- 2:15 p.m. — 6:00 p.m. *Computability Theory with Applications, II*
- 2:15 p.m. — 6:00 p.m. *Fractal Geometry and Applications: A Jubilee of Benoit Mandelbrot, II*
- 2:15 p.m. — 6:00 p.m. *Graph Theory, II*
- 2:15 p.m. — 6:00 p.m. *Nonlinear Elliptic Partial Differential Equations, II*
- 2:15 p.m. — 6:00 p.m. *Quantum Computation and Information, II*
- 2:15 p.m. — 6:00 p.m. *The Theory and Applications of Symmetric Functions, II*
- 2:15 p.m. — 6:00 p.m. *Low Dimensional Topology, II*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #10: PART A** *A dynamical systems approach to the differential equations course.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #14: PART A** *Viewing mathematics via interrelations for undergraduate courses.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #4: PART A** *Environmental mathematics.*

S U N D A Y , J A N U A R Y 6 (c o n t ' d)

- 2:15 p.m. — 6:00 p.m. **AMS CONTRIBUTED PAPER SESSIONS**
- 2:15 p.m. — 5:15 p.m. **SIAM MINISYMPOSIUM**
Applications of Symmetry in Dynamical Systems
- MAA CONTRIBUTED PAPER SESSIONS**
- 2:15 p.m. — 5:15 p.m. *Initiating and Sustaining Undergraduate Research Projects and Programs, I*
- 2:15 p.m. — 5:15 p.m. *Learning to Prove in Cooperative Learning and Technology-Supported Environments*
- 2:15 p.m. — 5:15 p.m. *Changing Student Views Regarding the Usefulness of Mathematics in Order to Increase the Number of Mathematics Majors*
- 2:15 p.m. — 5:15 p.m. *Computational Mathematics in Linear Algebra and Differential Equations, I*
- 2:15 p.m. — 3:45 p.m. **MAA SPECIAL PRESENTATION** *NCTM's work to improve mathematics education for all students.*
- 2:15 p.m. — 3:45 p.m. **MAA SPECIAL PRESENTATION** *Session for chairs.*
- 2:15 p.m. — 3:45 p.m. **MAA PANEL DISCUSSION** *A comprehensive department-based program for the preparation and professional development of graduate teaching assistants (GTAs) in mathematics.*
- 2:15 p.m. — 3:30 p.m. **MAA PROJECT NEXT PANEL DISCUSSION** *Introduction to the hiring process: Preparation, execution, and follow-up.*
- 3:20 p.m. — 4:10 p.m. **MAA INVITED ADDRESS** *Sophie Germain's grand plan for proving Fermat's Last Theorem.*
David J. Pengelley
- 3:20 p.m. — 4:20 p.m. **AWM PANEL DISCUSSION** *Mathematics after high school: How to promote success for more.*
- 4:00 p.m. — 5:30 p.m. **MAA PANEL DISCUSSION** *Mathematical preparation and support of teachers through rural universities.*
- 4:00 p.m. — 5:30 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *Modeling in college algebra.*
- 4:20 p.m. — 4:50 p.m. **AWM BUSINESS MEETING**
- 4:30 p.m. — 6:30 p.m. **MAA MINICOURSE #5: PART A** *Using physical and computerized puzzles as models of permutation groups in teaching abstract algebra.*
- 4:30 p.m. — 6:00 p.m. **AMS COMMITTEE ON THE PROFESSION PANEL DISCUSSION** *How the world sees mathematicians.*
- 4:30 p.m. — 6:30 p.m. **MAA SECTION OFFICERS**
- 5:00 p.m. — 6:00 p.m. **AMS-MAA GRADUATE STUDENT RECEPTION**
- 5:30 p.m. — 7:30 p.m. **MATHEMATICAL SCIENCES INSTITUTES RECEPTION**
- 6:00 p.m. — 7:00 p.m. **RECEPTION FOR FIRST-TIME PARTICIPANTS**
- 7:15 p.m. — 8:15 p.m. **YOUNG MATHEMATICIANS NETWORK TOWN MEETING**
- 8:30 p.m. — 9:30 p.m. **AMS JOSIAH WILLARD GIBBS LECTURE** *Title to be announced.* **Michael V. Berry**
- 9:30 p.m. — 11:00 p.m. **AWM RECEPTION**

M O N D A Y , J A N U A R Y 7

- 7:00 a.m. — 7:30 p.m. **EMPLOYMENT CENTER** *Distribution of schedules, scheduled interviews, and interview center (see article for specific hours), Exhibit Halls B1 and B2, SDCC*
- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**, Exhibit Halls B1 and B2, SDCC
- 8:00 a.m. — noon **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, III**

AMS SPECIAL SESSIONS

- 8:00 a.m. — noon *Symbolic Dynamics, III*
 8:00 a.m. — noon *Commutative Algebra and Algebraic Geometry, III*
 8:00 a.m. — noon *Algebraic Coding Theory, I*
 8:00 a.m. — noon *Algebras, Forms, and Algebraic Groups, I*
 8:00 a.m. — noon *Computability Theory with Applications, III*
 8:00 a.m. — noon *Fractal Geometry and Applications: A Jubilee of Benoit Mandelbrot, III*
 8:00 a.m. — noon *Graph Theory, III*
 8:00 a.m. — noon *Nonlinear Elliptic Partial Differential Equations, III*
 8:00 a.m. — noon *Quantum Computation and Information, III*
 8:00 a.m. — noon *The Theory and Applications of Symmetric Functions, III*
 8:00 a.m. — noon *Low Dimensional Topology, III*

8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #11: PART A** *Incorporating discrete mathematics in the preparation of K–12 mathematics teachers.*

8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #15: PART A** *Mathematical finance.*

8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #6: PART A** *WeBWork, an Internet-based system for generating and delivering homework problems to students.*

SIAM MINISYMPOSIA

- 8:00 a.m. — 10:55 a.m. *Partial Differential Equations and Applications*
 8:00 a.m. — 10:55 a.m. *Mathematics and Computers in Biology and Medicine*

8:00 a.m. — 10:55 a.m. **AMS CONTRIBUTED PAPER SESSIONS**

MAA CONTRIBUTED PAPER SESSIONS

- 8:00 a.m. — noon *History of Mathematics in the Second Millennium, II*
 8:00 a.m. — noon *Mathematics Courses for Teachers, K–12, II*
 8:00 a.m. — noon *Integrating Mathematics and Other Disciplines, II*
 8:00 a.m. — noon *Innovative Uses of the World Wide Web in Teaching Mathematics, II*

9:00 a.m. — 9:50 a.m. **AWM EMMY NOETHER LECTURE** *Computing over the reals: Where Turing meets Newton.*
Lenore Blum

9:00 a.m. — 10:30 a.m. **MAA COMMITTEE ON MATHEMATICS AND THE ENVIRONMENT PANEL DISCUSSION** *The environment: A context for learning.*

9:00 a.m. — 10:30 a.m. **MAA COMMITTEE ON THE MATHEMATICAL EDUCATION OF TEACHERS PANEL DISCUSSION** *Changing attitudes in the elementary education mathematics content courses: What works?*

9:00 a.m. — 10:30 a.m. **MAA PANEL DISCUSSION** *Opportunities for mathematically motivated youth.*

9:00 a.m. — 10:30 a.m. **MAA PROJECT NEXt PANEL DISCUSSION** *How to make the most of teaching evaluations.*

9:30 a.m. — 5:30 p.m. **BOOK SALES AND EXHIBITS**, Exhibit Halls B1 and B2, SDCC

10:05 a.m. — 10:55 a.m. **MAA INVITED ADDRESS** *Probability, combinatorics, and physics in analytic number theory.*
Andrew J. Granville

10:15 a.m. — 12:15 p.m. **MAA MINICOURSE #7: PART A** *Creating and exporting computer animations to the Web.*

10:45 a.m. — 12:15 p.m. **MAA PANEL DISCUSSION** *NSF funding opportunities for learning and teaching in the mathematical sciences.*

10:45 a.m. — 12:15 p.m. **MAA PANEL DISCUSSION** *College credit by examination: The Advance Placement (AP®) and College-Level Examination (CLEP®) Programs.*

10:45 a.m. — 12:15 p.m. **MAA PANEL DISCUSSION** *Life after a math sciences major: Tracking and using alumni career information.*

11:10 a.m. — noon **SIAM INVITED ADDRESS** *Variational PDE models and algorithms in image processing.* **Tony F. Chan**

- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE II** *Title to be announced.* **L. Craig Evans**
- 1:00 p.m. — 4:20 p.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS AND EDUCATION REFORM, IV**
- 1:00 p.m. — 4:20 p.m. **AMS-ASL SPECIAL SESSION ON SET THEORY AND CLASSIFICATION PROBLEM, III**
- AMS SPECIAL SESSIONS**
- 1:00 p.m. — 4:20 p.m. *Symbolic Dynamics, IV*
- 1:00 p.m. — 4:20 p.m. *Dynamic Equations on Time Scales, I*
- 1:00 p.m. — 4:20 p.m. *Commutative Algebra and Algebraic Geometry, IV*
- 1:00 p.m. — 4:20 p.m. *Algebraic Coding Theory, II*
- 1:00 p.m. — 4:20 p.m. *Algebras, Forms, and Algebraic Groups, II*
- 1:00 p.m. — 4:20 p.m. *Analysis and Application of Quasilinear Partial Differential Equations, III*
- 1:00 p.m. — 4:20 p.m. *Fractal Geometry and Applications: A Jubilee of Benoit Mandelbrot, IV*
- 1:00 p.m. — 4:20 p.m. *The Many Lives of Lattice Theory and the Theory of Ordered Sets, with Connections to Combinatorics, I*
- 1:00 p.m. — 4:20 p.m. *Wavelets for Undergraduates*
- 1:00 p.m. — 4:20 p.m. *Low Dimensional Topology, IV*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #12: PART A** *Introduction to mathematical card tricks.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #16: PART A** *Developing the ability to write proofs in high school students and college mathematics majors.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #8: PART A** *Real-world problem solving using technology and student projects.*
- 1:00 p.m. — 4:00 p.m. **MAA INVITED PAPER SESSION**
Probability and Combinatorics in Analytic Number Theory
- 1:00 p.m. — 4:00 p.m. **AMS CONTRIBUTED PAPER SESSIONS**
- SIAM MINISYMPOSIUM**
Mathematics Models for Image Analysis and Computer Vision
- MAA CONTRIBUTED PAPER SESSIONS**
- 1:00 p.m. — 4:00 p.m. *Initiating and Sustaining Undergraduate Research Projects and Programs, II*
- 1:00 p.m. — 4:00 p.m. *Computational Mathematics in Linear Algebra and Differential Equations, II*
- 1:00 p.m. — 4:00 p.m. *Deep Understanding of School Mathematics Needed by Teachers*
- 1:00 p.m. — 2:30 p.m. **AMS-MAA COMMITTEE ON TEACHING ASSISTANTS AND PART-TIME INSTRUCTORS PANEL DISCUSSION** *Research on TAs: Background, beliefs, attitude, and practice.*
- 1:00 p.m. — 2:30 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS-MAA TASK FORCE ON THE FIRST COLLEGE LEVEL MATHEMATICS COURSE PANEL DISCUSSION**
Rethinking the preparation for calculus.
- 1:00 p.m. — 2:30 p.m. **MAA CUPM SUBCOMMITTEE ON UNDERGRADUATE RESEARCH PANEL DISCUSSION**
Providing and promoting opportunities for undergraduates: A win-win situation.
- 2:00 p.m. — 4:00 p.m. **SIAM MINISYMPOSIUM**
Undergraduate Programs and Research Projects in Applied and Computational Mathematics
- 2:00 p.m. — 4:00 p.m. **MAA-PROJECT NExT AND YOUNG MATHEMATICIANS NETWORK POSTER SESSION**
- 2:15 p.m. — 3:05 p.m. **AMS INVITED ADDRESS** *Putting weirdness to work: Quantum information and quantum computation.* **John Preskill**
- 2:15 p.m. — 3:45 p.m. **MAA-PROJECT NEXT PANEL DISCUSSION** *Successful programs that integrate mathematics with other disciplines.*
- 2:45 p.m. — 4:15 p.m. **MAA SPECIAL PRESENTATION** *Mathematics preparation of doctorates in mathematics education.*
- 2:45 p.m. — 4:15 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *Integrating statistics/data analysis through the core curriculum.*

M O N D A Y , J A N U A R Y 7 (c o n t ' d)

- 2:45 p.m. — 4:15 p.m. **SUMMA-MAA COMMITTEE ON MINORITY PARTICIPATION IN MATHEMATICS PANEL DISCUSSION**
- 3:20 p.m. — 4:10 p.m. **AMS INVITED ADDRESS** *Computational problems in topology: The complexity of unknotting.* **Jeffrey C. Lagarias**
- 4:25 p.m. — 6:00 p.m. **JOINT PRIZE SESSION AND RECEPTION**
- 6:30 p.m. — 9:30 p.m. **MER BANQUET**

T U E S D A Y , J A N U A R Y 8

- 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**, Exhibit Halls B1 and B2, SDCC
- AMS-MAA SPECIAL SESSIONS**
History of Mathematics, I
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Dynamic Equations on Time Scales, II*
- 8:00 a.m. — 10:55 a.m. *Probabilistic Methods in Combinatorics and the Internet, I*
- 8:00 a.m. — 10:55 a.m. *Computational Topology, I*
- 8:00 a.m. — 10:55 a.m. *Algebras, Forms, and Algebraic Groups, III*
- 8:00 a.m. — 10:55 a.m. *Chaos, Stability, and Asymptotics in Difference Equations, I*
- 8:00 a.m. — 10:55 a.m. *Recent Developments in Analysis and Numerics of Fluid Problems (in memory of Jacques-Louis Lions), I*
- 8:00 a.m. — 10:55 a.m. *The Many Lives of Lattice Theory and the Theory of Ordered Sets, with Connections to Combinatorics, II*
- 8:00 a.m. — 10:55 a.m. *Partial Differential Equations and Their Applications, I*
- 8:00 a.m. — 10:55 a.m. *Topology and Its Applications, I*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #13: PART B** *Getting students involved in undergraduate research.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #3: PART B** *Optimal use of technology in teaching geometry at the college-university level.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #9: PART B** *The Fibonacci and Catalan numbers.*
- 8:00 a.m. — 10:55 a.m. **AMS CONTRIBUTED PAPER SESSIONS**
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Best Practices in Undergraduate Statistics Education*
- 8:00 a.m. — 10:55 a.m. *Redefining What a Modern "College Algebra" Experience Means, I*
- 8:00 a.m. — 10:55 a.m. *Strategies for Increasing the Diversity of Students in Mathematics*
- 8:00 a.m. — 10:55 a.m. *Using Examples from Sports to Enhance the Teaching of Mathematics*
- 8:00 a.m. — 10:55 a.m. *SIGMAA on Research on Undergraduate Mathematics Education, I*
- 8:00 a.m. — 11:00 a.m. **PME COUNCIL**
- 8:00 a.m. — 7:30 p.m. **EMPLOYMENT CENTER** *Scheduled interviews and interview center (see article for specific hours), Exhibit Halls B1 and B2, SDCC*
- 9:00 a.m. — 9:50 a.m. **AMS INVITED ADDRESS** *The role of rotation numbers in dynamical systems.* **John M. Franks**
- 9:00 a.m. — 10:15 a.m. **MAA-PROJECT NExT PANEL DISCUSSION** *Time for your first sabbatical...Now what?*
- 9:00 a.m. — 10:30 a.m. **MAA SPECIAL PRESENTATION** *Grant-writing workshop for proposals to the NSF Division of Undergraduate Education.*
- 9:00 a.m. — 10:30 a.m. **MAA PANEL DISCUSSION** *Mathematics in a postmodern age.*
- 9:00 a.m. — 10:30 a.m. **MAA COMMITTEE ON THE PARTICIPATION OF WOMEN-WOMEN AND MATHEMATICS NETWORK SPECIAL PRESENTATION** *Successful mathematics outreach programs for women and girls.*

- 9:00 a.m. — 5:00 p.m. **ASL INVITED ADDRESSES AND CONTRIBUTED PAPERS**
- 9:30 a.m. — 5:30 p.m. **BOOK SALES AND EXHIBITS**, Exhibit Halls B1 and B2, SDCC
- 10:05 a.m. — 10:55 a.m. **AMS INVITED ADDRESS** *Meromorphic continuation of L-functions.* **Richard L. Taylor**
- 11:10 a.m. — noon **AMS-MAA INVITED ADDRESS** *Harmonic numbers and the ABC-conjecture.* **Hendrik W. Lenstra Jr.**
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE III** *Title to be announced.* **L. Craig Evans**
- AMS-MAA SPECIAL SESSIONS**
 1:00 p.m. — 6:00 p.m. *History of Mathematics, II*
- AMS SPECIAL SESSIONS**
 1:00 p.m. — 6:00 p.m. *Dynamic Equations on Time Scales, III*
 1:00 p.m. — 6:00 p.m. *Computational Commutative Algebra and Algebraic Geometry, I*
 1:00 p.m. — 6:00 p.m. *Algebraic Coding Theory, III*
 1:00 p.m. — 6:00 p.m. *Computational Topology, II*
 1:00 p.m. — 6:00 p.m. *Hybrid Systems, I*
 1:00 p.m. — 6:00 p.m. *The Many Lives of Lattice Theory and the Theory of Ordered Sets, with Connections to Combinatorics, III*
 1:00 p.m. — 6:00 p.m. *Partial Differential Equations and Their Applications, II*
 1:00 p.m. — 6:00 p.m. *Stochastic Processes and Functional Analysis (in honor of M. M. Rao), I*
 1:00 p.m. — 6:00 p.m. *Topology and Its Applications, II*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #10: PART B** *A dynamical systems approach to the differential equations course.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #14: PART B** *Viewing mathematics via interrelations, for undergraduate courses.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #4: PART B** *Environmental mathematics.*
- 1:00 p.m. — 6:00 p.m. **AMS CONTRIBUTED PAPER SESSIONS**
- MAA CONTRIBUTED PAPER SESSIONS**
 1:00 p.m. — 3:15 p.m. *Classroom Demonstrations and Course Projects That Make a Difference*
 1:00 p.m. — 3:15 p.m. *Environmental Mathematics in the Classroom, I*
 1:00 p.m. — 3:15 p.m. *Who Needs Algebra! Alternative Introductory Mathematics Courses*
- 1:00 p.m. — 5:00 p.m. **NAM GRANVILLE-BROWNE SESSION OF PRESENTATIONS BY RECENT DOCTORAL RECIPIENTS IN THE MATHEMATICAL SCIENCES**
- 1:00 p.m. — 3:00 p.m. **MAA COMMITTEE ON THE TEACHING OF UNDERGRADUATE MATHEMATICS PANEL DISCUSSION** *The medium and the message: Practical suggestions on student reading and course efficiency using a structured conversation format.*
- 1:00 p.m. — 2:30 p.m. **MAA PANEL DISCUSSION** *BIG math: Projects in business, industry, and government.*
- 1:00 p.m. — 2:30 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *Discrete mathematics in the first two years.*
- 1:00 p.m. — 3:00 p.m. **MAA POSTER SESSION** *Projects supported by the NSF Division of Undergraduate Education.*
- 2:15 p.m. — 3:05 p.m. **MAA INVITED ADDRESS** *From shuffling cards to the roots of randomness.* **Persi W. Diaconis**
- 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 #5: PART B** *Using physical and computerized puzzles as models of permutation groups in teaching abstract algebra.*
- 3:30 p.m. — 5:00 p.m. **MAA PRESENTATIONS BY TEACHING AWARD RECIPIENTS**

- 4:00 p.m. — 6:30 p.m. **MAA UNDERGRADUATE STUDENT POSTER SESSION**
- 4:20 p.m. — 5:10 p.m. **AMS COMMITTEE ON SCIENCE POLICY-MAA SCIENCE POLICY COMMITTEE GOVERNMENT SPEAKER** Speaker to be announced.
- 5:00 p.m. — 7:00 p.m. **MAA INFORMAL SESSION** *Actuarial education.*
- 5:00 p.m. — 7:00 p.m. **ASSOCIATION FOR RESEARCH ON UNDERGRADUATE MATHEMATICS EDUCATION SIGMAA BUSINESS MEETING AND RECEPTION**
- 5:00 p.m. — 6:00 p.m. **WELCOME RECEPTION FOR MATHEMATICIANS IN BUSINESS, INDUSTRY, AND GOVERNMENT**
- 5:30 p.m. — 7:00 p.m. **MAA-YOUNG MATHEMATICIANS NETWORK PANEL DISCUSSION** *Closing the deal: The campus interview and beyond.*
- 5:30 p.m. — 7:00 p.m. **MAA SPECIAL PRESENTATION** *Carroll College Project InterMath Workshop reunion.*
- 6:00 p.m. — 9:00 p.m. **NAM RECEPTION, BANQUET, AND COX-TALBOT ADDRESS** *Speaker to be announced.*
- 6:00 p.m. — 7:00 p.m. **MAA PROJECT NEXt-YOUNG MATHEMATICIANS NETWORK SPECIAL PRESENTATION** *Planning ahead for the tenure/promotion process.*
- 6:00 p.m. — 8:00 p.m. **SIGMAA ON STATISTICS EDUCATION, 2002 BUSINESS MEETING, AND LECTURE**
- 7:30 p.m. — 8:20 p.m. **MAA STUDENT LECTURE** *Finding and fixing systems' weaknesses: The art and science of engineering risk analysis.* **M. Elisabeth Pate-Cornell**
- 8:30 p.m. — 10:30 p.m. **MAA PROJECT NEXt RECEPTION**

- 7:30 a.m. — 2:00 p.m. **JOINT MEETINGS REGISTRATION**, Exhibit Halls B1 and B2, SDCC
- 8:00 a.m. — 10:55 a.m. **AMS-MAA SPECIAL SESSIONS**
History of Mathematics, III
- 8:00 a.m. — 10:55 a.m. **AMS SPECIAL SESSIONS**
Probabilistic Methods in Combinatorics and the Internet, II
Computational Commutative Algebra and Algebraic Geometry, II
Algebraic Combinatorics, I
Chaos, Stability, and Asymptotics in Difference Equations, II
Recent Developments in Analysis and Numerics of Fluid Problems (in memory of Jacques-Louis Lions), II
Hybrid Systems, II
Partial Differential Equations and Their Applications, III
Research in Mathematics by Undergraduates, I
Stochastic Processes and Functional Analysis (in honor of M. M. Rao), II
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #11: PART B** *Incorporating discrete mathematics in the preparation of K–12 mathematics teachers.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #15: PART B** *Mathematical finance.*
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #6: PART B** *WeBWork, an Internet-based system for generating and delivering homework problems to students.*
- 8:00 a.m. — 10:55 a.m. **AMS CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. **MAA CONTRIBUTED PAPER SESSIONS**
Redefining What a Modern "College Algebra" Experience Means, II
Innovative Outcome Assessment in Statistics Education
SIGMAA on Research on Undergraduate Mathematics Education, II
- 8:30 a.m. — 10:00 a.m. **AMS COMMITTEE ON EDUCATION PANEL DISCUSSION**

- 8:30 a.m. — 5:00 p.m. **AWM WORKSHOP**
- 8:30 a.m. — 10:00 a.m. **AMS COMMITTEE ON EDUCATION PANEL DISCUSSION**
- 9:00 a.m. — 9:50 a.m. **MAA INVITED ADDRESS** *Reforms in mathematics education: Best practices and malpractices.*
Manuel P. Berriozábal
- 9:00 a.m. — 10:30 a.m. **MAA PANEL DISCUSSION** *Outreach programs for women: Assessment issues.*
- 9:00 a.m. — 10:30 a.m. **MAA WORKSHOP** *Want to coach a math modeling team? Where to start and how to finish.*
- 9:00 a.m. — 9:50 a.m. **NAM PANEL DISCUSSION** *Distance learning.*
- 9:00 a.m. — 5:00 p.m. **ASL INVITED ADDRESSES AND CONTRIBUTED PAPERS**
- 9:00 a.m. — noon **BOOK SALES AND EXHIBITS**, Exhibit Halls B1 and B2, SDCC
- 9:00 a.m. — 1:00 p.m. **EMPLOYMENT CENTER** *Interview center*, Exhibit Halls B1 and B2, SDCC
- 10:00 a.m. — 10:50 a.m. **NAM BUSINESS MEETING**
- 10:05 a.m. — 10:55 a.m. **MAA RETIRING PRESIDENTIAL ADDRESS** *The down side of the trapezoid: An immediate past president surveys the Internet.* **Thomas F. Banchoff**
- 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. — 1:50 p.m. **NAM WILLIAM W. S. CLAYTOR LECTURE** *Title to be announced.* **Katherine Okikiolu**
- 1:00 p.m. — 6:00 p.m. **AMS-MAA SPECIAL SESSIONS**
History of Mathematics, IV
- 1:00 p.m. — 6:00 p.m. **AMS SPECIAL SESSIONS**
Probabilistic Methods in Combinatorics and the Internet, III
Computational Commutative Algebra and Algebraic Geometry, III
Algebraic Combinatorics, II
Chaos, Stability, and Asymptotics in Difference Equations, III
Recent Developments in Analysis and Numerics of Fluid Problems (in memory of Jacques-Louis Lions), III
Hybrid Systems, III
Research in Mathematics by Undergraduates, II
Stochastic Processes and Functional Analysis (in honor of M. M. Rao), III
Topology and Its Applications, III
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #12: PART B** *Introduction to mathematical card tricks.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #16: PART B** *Developing the ability to write proofs in high school students and college mathematics majors.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #7: PART B** *Creating and exporting computer animations to the Web.*
- 1:00 p.m. — 6:00 p.m. **AMS CONTRIBUTED PAPER SESSIONS**
- 1:00 p.m. — 5:00 p.m. **MAA CONTRIBUTED PAPER SESSIONS**
Environmental Mathematics in the Classroom, II
Who Needs Algebra! Alternative Introductory Mathematics Courses
- 1:00 p.m. — 2:30 p.m. **MAA PANEL DISCUSSION** *The mathematics community and public support.*
- 1:00 p.m. — 2:30 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS PANEL DISCUSSION** *Reflections on the West Point Summary Conference for the CRAFTY Curriculum Foundations workshops.*
- 2:15 p.m. — 3:05 p.m. **AMS INVITED ADDRESS** *Analytical and topological issues concerning Sobolev mappings.*
Fanghua Lin

- 2:45 p.m. — 4:15 p.m. **MAA WORKSHOP** *Enhance undergraduate mathematics courses using globally interactive, live dynamic mathematics on the Web.*
- 2:45 p.m. — 4:15 p.m. **MAA CUPM SUBCOMMITTEE ON CALCULUS REFORM AND THE FIRST TWO YEARS OPEN DISCUSSION** *Reforming college algebra.*
- 3:15 p.m. — 5:15 p.m. **MAA MINICOURSE #8: PART B** *Real-world problem solving using technology and student projects.*
- 6:30 p.m. — 10:00 p.m. **AMS BANQUET**