



January 12–15, 2006

Program at a Glance

This document provides a thumbnail sketch of all scientific and social events so you can easily see which events may overlap and better plan your time.



T U E S D A Y , J A N U A R Y 1 0

- 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON MODELING AND SIMULATION OF BIOLOGICAL NETWORKS, I**
 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE: EXPERIMENTAL MATHEMATICS IN ACTION, I**

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

- 8:00 a.m. — 5:00 p.m. **MAA BOARD OF GOVERNORS**
 8:00 a.m. — 6:30 p.m. **AMS DEPARTMENT CHAIRS WORKSHOP**
 9:00 a.m. — 5:00 p.m. **AMS SHORT COURSE ON MODELING AND SIMULATION OF BIOLOGICAL NETWORKS, II**
 9:00 a.m. — 5:00 p.m. **MAA SHORT COURSE: EXPERIMENTAL MATHEMATICS IN ACTION, II**
 1:00 p.m. — 10:00 p.m. **AMS COUNCIL**
 3:00 p.m. — 7:00 p.m. **JOINT MEETINGS REGISTRATION**

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

- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**
 7:30 a.m. — 5:00 p.m. **EMPLOYMENT CENTER**
 8:00 a.m. — 10:50 a.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS EDUCATION REFORM, I**
 8:00 a.m. — 10:50 a.m. **AMS-SIAM SPECIAL SESSION ON FRAMES AND OPERATOR THEORY IN ANALYSIS AND SIGNAL PROCESSING, I**
 8:00 a.m. — 10:50 a.m. **AMS-ASL SPECIAL SESSION ON INTERDISCIPLINARY RESEARCH INVOLVING ANALYSIS AND LOGIC, I**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:50 a.m. *Mahler Measure and Heights, I*
 8:00 a.m. — 10:50 a.m. *Division Algebras, Galois Theory, Cohomology and Geometry, I*
 8:00 a.m. — 10:50 a.m. *Commutative Rings and Monoids, I*
 8:00 a.m. — 10:50 a.m. *Topological Spaces Associated with $C(X)$, I*
 8:00 a.m. — 10:50 a.m. *Value Distribution in Classical and p -adic Functions Theory, I*
 8:00 a.m. — 10:50 a.m. *Szygies in Commutative Algebra and Geometry, I*
 8:00 a.m. — 10:50 a.m. *Algebraic Statistics: Theory and Practice, I*
 8:00 a.m. — 10:50 a.m. *Extension of Functions, I*
- 8:00 a.m. — 6:00 p.m. **SESSIONS OF AMS CONTRIBUTED PAPERS**
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Philosophy of Mathematics*
 8:00 a.m. — 10:55 a.m. *Mathlets for Teaching and Learning Mathematics, I*
 8:00 a.m. — 10:55 a.m. *Post-secondary Mathematics Assessment: Needs and Challenges*
 8:00 a.m. — 10:55 a.m. *Professional Development Programs for K–12 Teachers*

- 8:00 a.m. — 10:55 a.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, I**
- 8:00 a.m. — 10:55 a.m. **SIAM MINISYMPOSIUM ON MATHEMATICAL NEUROSCIENCE: FROM EXPERIMENT TO THEORY**
- 8:00 a.m. — 10:55 a.m. **SIAM MINISYMPOSIUM ON NUMERICAL SOLUTION OF PARTIAL DIFFERENTIAL EQUATIONS AND APPLICATIONS TO FLOW IN POROUS MEDIA**
- 8:00 a.m. — 9:20 a.m. **MAA-AMS COMMITTEE ON TEACHING ASSISTANTS AND PART-TIME INSTRUCTORS PANEL DISCUSSION** *Permanent use of temporary faculty: The status of nonladder faculty in departments of mathematics.*
- 8:00 a.m. — 9:20 a.m. **SIGMAA ON STATISTICS EDUCATION PANEL DISCUSSION** *Implications of the new ASA (GAISE) guidelines for teaching statistics.*
- 8:30 a.m. — 10:55 a.m. **MAA COMMITTEE ON GRADUATE STUDENTS PRESENTATION** *Workshop on training T.A.s.*
- 9:00 a.m. — 10:55 a.m. **MAA INVITED PAPER SESSION ON THE ROLE OF ONLINE TECHNOLOGY COURSES FOR TEACHERS OF PRESERVICE MATHEMATICS TEACHERS**
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #12: PART A** *Getting students involved in undergraduate research.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #1: PART A** *Designing and evaluating assessments for introductory statistics.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #7: PART A** *Geometry with history for teaching teachers.*
- 9:30 a.m. — 10:50 a.m. **MAA CUPM AND SIGMAA ON STATISTICS EDUCATION PANEL DISCUSSION** *Requiring statistics of every mathematics major: Model courses.*
- 9:30 a.m. — 10:50 a.m. **MAA PANEL DISCUSSION** *National Science Foundation programs supporting learning and teaching in the mathematical sciences.*
- 10:05 a.m. — 10:55 a.m. **AMS INVITED ADDRESS** *Title to be announced.* **Mikhail Kapranov**
- 11:10 a.m. — 12:00 p.m. **AMS-MAA INVITED ADDRESS** *Title to be announced.* **László Lovász**
- 12:15 p.m. — 5:30 p.m. **EXHIBITS AND BOOK SALES**
- 12:30 p.m. — 5:00 p.m. **MATH ON THE WEB, I**
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE I** *Entangled radicals, Part I.* **Hendrik W. Lenstra Jr.**
- 2:15 p.m. — 3:05 p.m. **MAA INVITED ADDRESS** *Preference sets, graphs, and voting in agreeable societies.* **Francis Edward Su**
- 2:15 p.m. — 6:05 p.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS EDUCATION REFORM, II**
- 2:15 p.m. — 6:05 p.m. **AMS-MAA SPECIAL SESSION ON ANCIENT AND NONWESTERN MATHEMATICS, I**
- 2:15 p.m. — 6:05 p.m. **AMS-SIAM SPECIAL SESSION ON CONTEMPORARY DYNAMICAL SYSTEMS, I**
- AMS SPECIAL SESSIONS**
- 2:15 p.m. — 6:05 p.m. *Mahler Measure and Heights, II*
- 2:15 p.m. — 6:05 p.m. *Division Algebras, Galois Theory, Cohomology and Geometry, II*
- 2:15 p.m. — 6:05 p.m. *Dynamic Equations with Applications, I*
- 2:15 p.m. — 6:05 p.m. *Commutative Rings and Monoids, II*
- 2:15 p.m. — 6:05 p.m. *Topological Spaces Associated with $C(X)$, II*
- 2:15 p.m. — 6:05 p.m. *Value Distribution in Classical and p -adic Functions Theory, II*
- 2:15 p.m. — 6:05 p.m. *Szygies in Commutative Algebra and Geometry, II*
- 2:15 p.m. — 6:05 p.m. *Extension of Functions, II*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #13: PART A** *The Fibonacci and Catalan numbers.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #2: PART A** *Java applets in teaching mathematics.*
- 2:15 p.m. — 4:15 p.m. **MAA MINICOURSE #8: PART A** *Mathematical and statistical modeling in biology: Competitive exclusion, coexistence, estimation, and control.*

- 2:15 p.m. — 6:00 p.m. **MAA CONTRIBUTED PAPER SESSIONS**
Number-Theoretic Applications
- 2:15 p.m. — 6:00 p.m. *Teaching Mathematics Courses Online*
- 2:15 p.m. — 6:00 p.m. *Teaching and Assessing Modeling and Problem Solving*
- 2:15 p.m. — 6:00 p.m. *Getting Students to Discuss and to Write about Mathematics, I*
- 2:15 p.m. — 6:00 p.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, II**
- 2:15 p.m. — 6:00 p.m. **SIAM MINISYMPOSIUM ON GEOMETRIC REPRESENTATIONS OF GRAPHS**
- 2:15 p.m. — 6:00 p.m. **SIAM MINISYMPOSIUM ON EDUCATION: PREPARING MATHEMATICS STUDENTS FOR INTERDISCIPLINARY RESEARCH**
- 2:15 p.m. — 5:15 p.m. **MAA INVITED PAPER SESSION ON ASSESSMENT OF LEARNING IN THE MATHEMATICS MAJOR**
- 2:15 p.m. — 4:15 p.m. **MAA INVITED PAPER SESSION ON ENVIRONMENTAL MODELING**
- 2:15 p.m. — 3:45 p.m. **PROJECT NEXT PANEL DISCUSSION** *Firefighting, paper trailing, and cat herding: Everything you wanted to know to be an administrator but were afraid to ask.*
- 2:15 p.m. — 3:35 p.m. **MAA COMMITTEE ON GRADUATE STUDENTS-YMN PANEL DISCUSSION** *How to interview for your first job.*
- 2:15 p.m. — 3:35 p.m. **MAA PANEL DISCUSSION** *Advice and Admonitions for NSF projects: What worked, what did not, and what lessons were learned.*
- 2:30 p.m. — 5:00 p.m. **MAA SECTION OFFICERS**
- 3:20 p.m. — 4:10 p.m. **MAA INVITED ADDRESS** *Participation in mathematics by American Indians: A case study in underrepresentation.* **Robert E. Megginson**
- 3:20 p.m. — 4:35 p.m. **AWM PANEL DISCUSSION** *Laurence Summers: One year later.*
- 3:50 p.m. — 5:10 p.m. **MAA-YMN PANEL DISCUSSION** *You have a job, now what? Professional development opportunities.*
- 4:00 p.m. — 4:45 p.m. **MAA SPECIAL PRESENTATION** *The great Pi/e debate.*
- 4:15 p.m. — 6:15 p.m. **SIGMAA ON ENVIRONMENTAL MATHEMATICS BUSINESS MEETING AND SPECIAL INVITED PRESENTATION**
- 4:45 p.m. — 6:45 p.m. **MAA MINICOURSE #3: PART A** *Using and adapting online materials.*
- 4:45 p.m. — 6:45 p.m. **MAA MINICOURSE #9: PART A** *Discrete dynamical systems and problem solving.*
- 4:45 p.m. — 6:45 p.m. **MAA MINICOURSE #14: PART A** *Teaching linear algebra with applications.*
- 4:30 p.m. — 6:00 p.m. **AMS COMMITTEE ON THE PROFESSION PRESENTATION**
- 4:40 p.m. — 5:10 p.m. **AWM BUSINESS MEETING**
- 5:00 p.m. — 6:00 p.m. **FRIENDS OF WILLIAMS RECEPTION**
- 5:30 p.m. — 6:30 p.m. **RECEPTION FOR GRADUATE STUDENTS AND FIRST-TIME PARTICIPANTS**
- 5:30 p.m. — 8:00 p.m. **MATHEMATICAL INSTITUTES OPEN HOUSE**
- 8:30 p.m. — 9:30 p.m. **AMS JOSIAH WILLARD GIBBS LECTURE** *Title to be announced.* **Michael Savageau**
- 9:30 p.m. — 11:00 p.m. **AWM RECEPTION**

- 7:00 a.m. — 7:30 p.m. **EMPLOYMENT CENTER**
- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**
- 8:00 a.m. — 10:00 a.m. **MAA MINICOURSE #4: PART A** *Creating interactive workbooks using MS excel.*
- 8:00 a.m. — 11:50 a.m. **AMS-MAA-MER SPECIAL SESSION ON MATHEMATICS EDUCATION REFORM, III**
- 8:00 a.m. — 11:50 a.m. **AMS-SIAM SPECIAL SESSION ON NONLINEAR DYNAMICAL SYSTEMS, I**
- 8:00 a.m. — 11:50 a.m. **AMS-ASL SPECIAL SESSION ON INTERDISCIPLINARY RESEARCH INVOLVING ANALYSIS AND LOGIC, II**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 11:50 a.m. *Algebraic and Enumerative Combinatorics, I*
- 8:00 a.m. — 11:50 a.m. *Arithmetic Geometry and Modular Forms, I*
- 8:00 a.m. — 11:50 a.m. *Recent Trends in Convex and Discrete Geometry, I*
- 8:00 a.m. — 11:50 a.m. *Dynamic Equations With Applications, II*
- 8:00 a.m. — 11:50 a.m. *Nonautonomous Discrete Dynamics, I*
- 8:00 a.m. — 11:50 a.m. *Algebraic Statistics: Theory and Practice, II*
- 8:00 a.m. — 11:50 a.m. *Continued Fractions, I*
- 8:00 a.m. — 11:50 a.m. *The Many Lives of Lattice Theory, the Theory of Ordered Sets, and Universal Algebra, I*
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 11:55 a.m. *Mathlets for Teaching and Learning Mathematics, II*
- 8:00 a.m. — 11:55 a.m. *Using History of Mathematics in your Mathematics Courses*
- 8:00 a.m. — 11:55 a.m. *Innovative Teaching/Learning Ideas Using Technology in the Teaching of Courses before College Algebra*
- 8:00 a.m. — 11:55 a.m. *Research and Other Mathematical Experiences for Students Outside the Classroom*
- 8:00 a.m. — 11:55 a.m. *Courses Below Calculus: A Continuing Focus, I*
- 8:00 a.m. — 11:55 a.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, III**
- 8:00 a.m. — 11:00 a.m. **SIAM MINISYMPOSIUM ON INVERSE PROBLEMS: THEORY AND NUMERICS FOR NOVEL APPLICATIONS, I**
- 8:00 a.m. — 11:00 a.m. **SIAM MINISYMPOSIUM ON MATHEMATICAL NEUROSCIENCE: FROM EXPERIMENT TO THEORY, II**
- 8:00 a.m. — 4:15 p.m. **SESSIONS OF AMS CONTRIBUTED PAPERS**
- 8:00 a.m. — 10:00 a.m. **SIGMAA OFFICERS MEETING**
- 8:30 a.m. — 10:00 a.m. **MAA-PROJECT NEXT PANEL DISCUSSION** *Getting started in mathematical biology.*
- 9:00 a.m. — 9:50 a.m. **AWM EMMY NOETHER LECTURE** *Mathematical results and challenges in learning theory.* **Ingrid Daubechies**
- 9:00 a.m. — 10:20 a.m. **MAA-YMN PANEL DISCUSSION** *Undergraduate career paths in mathematics.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #10: PART A** *A beginner's guide to the scholarship of teaching and learning in mathematics.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #15: PART A** *A novel approach to problem solving.*
- 9:30 a.m. — 5:30 p.m. **EXHIBITS AND BOOK SALES**
- 10:00 a.m. — 4:00 p.m. **MATH ON THE WEB, II**
- 10:05 a.m. — 10:55 a.m. **MAA INVITED ADDRESS** *The mathematics of everyday language.* **Keith J. Devlin**
- 10:30 a.m. — 12:30 p.m. **MAA MINICOURSE #5: PART A** *Finite group behavior: Windows software for teaching beginning group theory.*
- 10:30 a.m. — 12:00 p.m. **AMS SPECIAL PRESENTATION** *Who wants to be a mathematician.*

- 10:30 a.m. — 12:00 p.m. **AMS SPECIAL PRESENTATION** *T.A. development using case studies: A workshop for faculty (Part 1).*
- 10:45 a.m. — 12:05 p.m. **MAA PANEL DISCUSSION** *Integrating mathematics with other disciplines.*
- 10:45 a.m. — 12:05 p.m. **MAA SPECIAL PRESENTATION** *Proposal writing workshop for grant applications to the NSF Division of Undergraduate Education.*
- 11:10 a.m. — 12:00 p.m. **SIAM INVITED ADDRESS** *Integrability, imaging of the brain, and the Dirichlet to Neumann map.*
Thanasis Fokas
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE II** *Entangled radicals, Part II.* **Hendrik W. Lenstra Jr.**
- 1:00 p.m. — 3:50 p.m. **AMS-MAA SPECIAL SESSION ON ANCIENT AND NONWESTERN MATHEMATICS, II**
- 1:00 p.m. — 3:50 p.m. **AMS-SIAM SPECIAL SESSION ON FRAMES AND OPERATOR THEORY IN ANALYSIS AND SIGNAL PROCESSING, II**
- AMS SPECIAL SESSIONS**
- 1:00 p.m. — 3:50 p.m. *Mahler Measure and Heights, III*
- 1:00 p.m. — 3:50 p.m. *Recent Trends in Convex and Discrete Geometry, II*
- 1:00 p.m. — 3:50 p.m. *Division Algebras, Galois Theory, Cohomology and Geometry, III*
- 1:00 p.m. — 3:50 p.m. *Topological Spaces Associated with $C(X)$, III*
- 1:00 p.m. — 3:50 p.m. *Value Distribution in Classical and p -adic Functions Theory, III*
- 1:00 p.m. — 3:50 p.m. *Algebraic Statistics: Theory and Practice, III*
- 1:00 p.m. — 3:50 p.m. *Extension of Functions, III*
- 1:00 p.m. — 3:50 p.m. *Continued Fractions, II*
- 1:00 p.m. — 3:50 p.m. *The Many Lives of Lattice Theory, the Theory of Ordered Sets, and Universal Algebra, II*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #11: PART A** *Teaching a course in the history of mathematics.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #16: PART A** *Fair division: From cake-cutting to dispute resolution.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #6: PART A** *Technology tools for discrete mathematics.*
- MAA CONTRIBUTED PAPER SESSIONS**
- 1:00 p.m. — 4:10 p.m. *Getting Students to Discuss and to Write about Mathematics, II*
- 1:00 p.m. — 4:10 p.m. *Mathematics of Sports and Games*
- 1:00 p.m. — 4:10 p.m. *Mathematical Connections in the Arts*
- 1:00 p.m. — 4:10 p.m. *Research on the Teaching and Learning of Undergraduate Mathematics*
- 1:00 p.m. — 4:10 p.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, IV**
- 1:00 p.m. — 4:10 p.m. **SIAM MINISYMPOSIUM ON NEW TRANSFORM METHODS FOR DIFFERENTIAL EQUATIONS**
- 1:00 p.m. — 4:10 p.m. **SIAM MINISYMPOSIUM ON INVERSE PROBLEMS: THEORY AND NUMERICS FOR NOVEL APPLICATIONS, II**
- 1:00 p.m. — 2:20 p.m. **MAA-AWM PANEL DISCUSSION** *Teaching a course on women and/or minorities in mathematics.*
- 1:00 p.m. — 2:20 p.m. **MAA COMMITTEE ON THE PROFESSION PANEL DISCUSSION** *Scholarship scenarios.*
- 1:00 p.m. — 2:30 p.m. **PROJECT NEXT PANEL DISCUSSION** *The mathematics profession in 2016: Where are we going?*
- 2:00 p.m. — 4:00 p.m. **MAA PROJECT NEXT-YMN POSTER SESSION**
- 2:00 p.m. — 4:00 p.m. **SUMMER PROGRAM FOR WOMEN IN MATHEMATICS** *Participants from past programs will describe their experiences.*
- 2:15 p.m. — 3:05 p.m. **AMS INVITED ADDRESS** *Recent developments in symplectic topology.* **Dusa McDuff**
- 2:30 p.m. — 3:50 p.m. **MAA PANEL DISCUSSION** *What business looks for in new hires.*
- 2:30 p.m. — 4:00 p.m. **AMS SPECIAL PRESENTATION** *T.A. development using case studies: A workshop for faculty (Part 2).*

F R I D A Y , J A N U A R Y 1 3 (c o n t ' d)

- 2:30 p.m. — 3:50 p.m. **MAA PANEL DISCUSSION** *AMATYC's Beyond Crossroads: Implementing standards-based mathematics instruction.*
- 3:20 p.m. — 4:10 p.m. **AMS RETIRING PRESIDENTIAL ADDRESS** *Threads From My Life: Linear (good) Resolutions and Small (seductive) Varieties.* **David Eisenbud**
- 4:25 p.m. — 5:45 p.m. **JOINT PRIZE SESSION**
- 5:45 p.m. — 6:45 p.m. **SIGMAA ON BUSINESS, INDUSTRY, AND GOVERNMENT RECEPTION**
- 5:45 p.m. — 7:00 p.m. **JOINT PRIZE SESSION RECEPTION**
- 5:45 p.m. — 7:00 p.m. **MAA TWO-YEAR COLLEGE RECEPTION**
- 5:45 p.m. — 7:00 p.m. **UNIVERSITY OF IOWA RECEPTION**
- 5:45 p.m. — 7:00 p.m. **LEHIGH UNIVERSITY RECEPTION**
- 5:45 p.m. — 7:00 p.m. **NEW MEXICO STATE UNIVERSITY RECEPTION**
- 5:45 p.m. — 7:15 p.m. **MAA INFORMATION SESSION** *Current issues in actuarial education.*
- 5:45 p.m. — 7:45 p.m. **SIGMAA ON RESEARCH IN UNDERGRADUATE MATHEMATICS BUSINESS MEETING AND GUEST LECTURE**
- 5:45 p.m. — 7:45 p.m. **SIGMAA ON STATISTICS EDUCATION BUSINESS MEETING**
- 6:00 p.m. — 7:00 p.m. **UNIVERSITY OF CHICAGO DEPARTMENT OF MATHEMATICS ALUMNI RECEPTION**
- 6:00 p.m. — 7:30 p.m. **WEB SIGMAA BUSINESS MEETING AND GUEST LECTURES**
- 6:00 p.m. — 8:00 p.m. **SIGMAA ON THE HISTORY OF MATHEMATICS ANNUAL MEETING AND GUEST LECTURE**
- 6:00 p.m. — 8:00 p.m. **ASSOCIATION OF LESBIAN, GAY, BISEXUAL, AND TRANSGENDERED MATHEMATICIANS RECEPTION**
- 6:00 p.m. — 8:00 p.m. **CLAREMONT COLLEGES RECEPTION**
- 6:30 p.m. — 9:00 p.m. **MER BANQUET**
- 7:30 p.m. — 8:30 p.m. **YOUNG MATHEMATICIANS' NETWORK TOWN MEETING** *Concerns of young mathematicians.*
- 8:15 p.m. — 9:45 p.m. **KNITTING CIRCLE**

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

- 7:00 a.m. — 8:00 a.m. **MAA/PME STUDENT CHAPTERS ADVISORS BREAKFAST**
- 7:30 a.m. — 4:00 p.m. **JOINT MEETINGS REGISTRATION**
- 7:30 a.m. — 7:30 p.m. **EMPLOYMENT CENTER**
- 8:00 a.m. — 10:50 a.m. **AMS-SIAM SPECIAL SESSION ON NONLINEAR DYNAMICAL SYSTEMS, II**
- 8:00 a.m. — 10:50 a.m. **AMS-SIAM SPECIAL SESSION ON FRAMES AND OPERATOR THEORY IN ANALYSIS AND SIGNAL PROCESSING, III**
- 8:00 a.m. — 10:50 a.m. **AMS-SIAM SPECIAL SESSION ON CONTEMPORARY DYNAMICAL SYSTEMS, II**
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:50 a.m. *Algebraic and Enumerative Combinatorics, II*
- 8:00 a.m. — 10:50 a.m. *Arithmetic Geometry and Modular Forms, II*
- 8:00 a.m. — 10:50 a.m. *Recent Trends in Convex and Discrete Geometry, III*
- 8:00 a.m. — 10:50 a.m. *Commutative Rings and Monoids, III*
- 8:00 a.m. — 10:50 a.m. *Szygies in Commutative Algebra and Geometry, III*
- 8:00 a.m. — 10:50 a.m. *Field Extensions and Algorithms, I*
- 8:00 a.m. — 10:50 a.m. *Nonautonomous Discrete Dynamics, II*
- 8:00 a.m. — 10:50 a.m. *Continued Fractions, III*

- 8:00 a.m. — 5:00 p.m. **ASL INVITED ADDRESSES AND CONTRIBUTED PAPERS**
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Courses Below Calculus: A Continuing Focus, II*
- 8:00 a.m. — 10:55 a.m. *Mathematics of Chemistry*
- 8:00 a.m. — 10:55 a.m. *Mathematics Experiences in Business, Industry, and Government*
- 8:00 a.m. — 10:55 a.m. *Countering "I Can't Do Math": Strategies for Teaching Underprepared, Math-Anxious Students, I*
- 8:00 a.m. — 10:55 a.m. *Teaching Operations Research in the Undergraduate Classroom*
- 8:00 a.m. — 10:55 a.m. *My Favorite Demo: Innovative Strategies for Mathematics Instructors, I*
- 8:00 a.m. — 10:55 a.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, V**
- 8:00 a.m. — 5:00 p.m. **SESSIONS OF AMS CONTRIBUTED PAPERS**
- 8:00 a.m. — 11:00 a.m. **PME COUNCIL**
- 9:00 a.m. — 9:50 a.m. **AMS INVITED ADDRESS** *Whitney's extension problems.* **Charles L. Fefferman**
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #12: PART B** *Getting students involved in undergraduate research.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #1: PART B** *Designing and evaluating assessments for introductory statistics.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #7: PART B** *Geometry with history for teaching teachers.*
- 9:00 a.m. — 10:20 a.m. **MAA COMMITTEE ON TECHNOLOGIES IN MATHEMATICS EDUCATION PANEL DISCUSSION** *Electronic homework systems.*
- 9:00 a.m. — 10:20 a.m. **MAA-YMN PANEL DISCUSSION** *Transitioning into graduate school.*
- 9:00 a.m. — 10:20 a.m. **MAA SESSION FOR CHAIRS** *Building bridges.*
- 9:00 a.m. — 10:20 a.m. **SIGMAA ON THE TEACHING OF ADVANCED HIGH SCHOOL MATHEMATICS PANEL DISCUSSION** *AP Calculus: Friend or foe?*
- 9:00 a.m. — 11:00 a.m. **MAA POSTER SESSION** *Special mathematical outreach programs.*
- 9:30 a.m. — 11:00 a.m. **PROJECT NEXT PANEL DISCUSSION** *Making the most of your sabbatical.*
- 9:30 a.m. — 5:30 p.m. **EXHIBITS AND BOOK SALES**
- 10:00 a.m. — 5:00 p.m. **MATH ON THE WEB**
- 10:05 a.m. — 10:55 a.m. **AMS INVITED ADDRESS** *Persistent homology, diagrams, and vineyards.* **Herbert Edelsbrunner**
- 11:10 a.m. — 12:00 p.m. **AMS-MAA INVITED ADDRESS** *Title to be announced.* **Svetlana Y. Jitomirskaya**
- 1:00 p.m. — 2:00 p.m. **AMS COLLOQUIUM LECTURES: LECTURE III** *Entangled radicals, Part III.* **Hendrik W. Lenstra Jr.**
- 1:00 p.m. — 1:50 p.m. **MAA STUDENT LECTURE** *The many faces of pi.* **Marc Chamberland**
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #13: PART B** *The Fibonacci and Catalan numbers.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #2: PART B** *Java applets in teaching mathematics.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #8: PART B** *Mathematical and statistical modeling in biology: Competitive exclusion, coexistence, estimation, and control.*
- 1:00 p.m. — 3:00 p.m. **MAA POSTER SESSION ON PROJECTS SUPPORTED BY THE NSF DIVISION OF UNDERGRADUATE EDUCATION**
- 1:00 p.m. — 5:50 p.m. **AMS-MAA-SIAM SPECIAL SESSION ON RESEARCH IN MATHEMATICS BY UNDERGRADUATES,**
- 1:00 p.m. — 5:50 p.m. **AMS-MAA SPECIAL SESSION ON THE HISTORY OF MATHEMATICS, I**

AMS-SIAM SPECIAL SESSIONS

- 1:00 p.m. — 5:50 p.m. *Nonlinear Dynamical Systems, III*
 1:00 p.m. — 5:50 p.m. *Analysis and Implementation of Finite Element Methods, I*
 1:00 p.m. — 5:50 p.m. *Time Reversal Methods: Analysis and Applications, I*
 1:00 p.m. — 5:50 p.m. *Stochastic, Large Scale and Hybrid Systems with Applications, I*

AMS SPECIAL SESSIONS

- 1:00 p.m. — 5:50 p.m. *Current Events*
 1:00 p.m. — 5:50 p.m. *Algebraic Groups, Symmetric Spaces, and Invariant Theory, I*
 1:00 p.m. — 5:50 p.m. *Quantum Invariants of Knots and 3-Manifolds, I*
 1:00 p.m. — 5:50 p.m. *Field Extensions and Algorithms, II*
 1:00 p.m. — 5:50 p.m. *New Developments in Symplectic Topology, I*
 1:00 p.m. — 5:50 p.m. *The Many Lives of Lattice Theory, the Theory of Ordered Sets, and Universal Algebra, III*

MAA CONTRIBUTED PAPER SESSIONS

- 1:00 p.m. — 4:00 p.m. *Achieving Quantitative Literacy*
 1:00 p.m. — 5:55 p.m. *My Favorite Demo: Innovative Strategies for Mathematics Instructors, II*
 1:00 p.m. — 5:55 p.m. *Mathematics and Popular Culture*
 1:00 p.m. — 5:55 p.m. *My Three Favorite Original Calculus Problems*
 1:00 p.m. — 5:55 p.m. *First Steps for Implementing the Recommendations of the Guidelines for Assessment and Instruction in Statistics Education (GAISE) College Report*
 1:00 p.m. — 5:55 p.m. *Handheld Technology in Content and Methods Courses for Prospective Teachers with a Special Interest Strand Devoted to Teaching and Learning Geometry*

MAA GENERAL CONTRIBUTED PAPER SESSION, VI

- 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Topics of ethics in mathematics.*
 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Mathematics and biology 2010: Building connections.*
 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Algebra at various levels: How does it differ?*

NAM GRANVILLE-BROWN-HAYNES SESSION OF PRESENTATIONS BY RECENT DOCTORAL RECIPIENTS IN THE MATHEMATICAL SCIENCES

- 2:15 p.m. — 4:00 p.m. **RMMC BOARD OF DIRECTORS**

MAA PRESENTATIONS BY TEACHING AWARD RECIPIENTS

- 2:30 p.m. — 4:00 p.m. **MAA COMMITTEE ON MATHEMATICS ACROSS THE DISCIPLINES PANEL DISCUSSION**
Models for a one-semester course in discrete mathematics.

- 2:30 p.m. — 3:50 p.m. **WEB SIGMAA SPECIAL PRESENTATION** *Serious data and serious tools on the Web for a serious problem.*

- 2:30 p.m. — 3:50 p.m. **MAA PANEL DISCUSSION** *Mathematicians involved in school mathematics.*

AMS COMMITTEE ON SCIENCE POLICY PANEL DISCUSSION

- 2:30 p.m. — 4:50 p.m. **MAA DEMONSTRATION AND DISCUSSION** *Mathematical circles.*

- 3:30 p.m. — 5:30 p.m. **MAA MINICOURSE #3: PART B** *Using and adapting online materials.*

- 3:30 p.m. — 5:30 p.m. **MAA MINICOURSE #9: PART B** *Discrete dynamical systems and problem solving.*

- 3:30 p.m. — 5:30 p.m. **MAA MINICOURSE #14: PART B** *Teaching linear algebra with applications.*

SIGMAA ON QUANTITATIVE LITERACY BUSINESS MEETING AND RECEPTION

- 4:00 p.m. — 5:00 p.m. **AMS COMMITTEE ON SCIENCE POLICY-MAA SCIENCE POLICY COMMITTEE GOVERNMENT SPEAKER** *Speaker and title to be announced.*

- 4:00 p.m. — 6:30 p.m. **MAA UNDERGRADUATE POSTER SESSION**

S A T U R D A Y , J A N U A R Y 1 4 (c o n t ' d)

- 5:00 p.m. — 7:00 p.m. **UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN RECEPTION**
- 6:00 p.m. — 7:00 p.m. **AMS MATHEMATICAL REVIEWS RECEPTION**
- 6:00 p.m. — 8:00 p.m. **SIGMAA ON THE PHILOSOPHY OF MATHEMATICS ANNUAL MEETING, RECEPTION, AND GUEST LECTURE**
- 6:00 p.m. — 9:30 p.m. **NAM RECEPTION AND BANQUET** *The Cox-Talbot Address will be given at the conclusion of the dinner.*
- 6:00 p.m. — 9:00 p.m. **ASSOCIATION OF CHRISTIANS IN THE MATHEMATICAL SCIENCES BANQUET**
- 6:30 p.m. — 8:30 p.m. **BUDAPEST SEMESTERS IN MATHEMATICS REUNION**
- 8:30 p.m. — 10:30 p.m. **MAA PROJECT NEXT RECEPTION**
- 8:45 p.m. — 9:30 p.m. **COX-TALBOT ADDRESS** *Speaker and title to be announced.*

S U N D A Y , J A N U A R Y 1 5

- 7:00 a.m. — 8:30 a.m. **MAA DEPARTMENT CHAIRS LIAISON BREAKFAST MEETING**
- 7:00 a.m. — 8:45 a.m. **MAA MINORITY CHAIRS BREAKFAST MEETING**
- 7:00 a.m. — 7:50 a.m. **NONDENOMINATIONAL WORSHIP SERVICE**
- 7:30 a.m. — 2:00 p.m. **JOINT MEETINGS REGISTRATION**
- 8:00 a.m. — 10:50 a.m. **AMS-MAA-SIAM SPECIAL SESSION ON RECENT ADVANCES IN MATHEMATICAL BIOLOGY AND EPIDEMIOLOGY, I**
- 8:00 a.m. — 10:50 a.m. **AMS-AWM-MAA SPECIAL SESSION ON MATHEMATICAL RESULTS AND CHALLENGES IN LEARNING THEORY**
- AMS-SIAM SPECIAL SESSIONS**
- 8:00 a.m. — 10:50 a.m. *Frames and Operator Theory in Analysis and Signal Processing, IV*
- 8:00 a.m. — 10:50 a.m. *Boundary Value Problems for Ordinary Differential Equations, I*
- 8:00 a.m. — 10:50 a.m. *Theory and Application of Stochastic Differential Equations, I*
- 8:00 a.m. — 10:50 a.m. *Symbolic-Numeric Computation and Applications, I*
- AMS SPECIAL SESSIONS**
- 8:00 a.m. — 10:50 a.m. *Algebraic and Enumerative Combinatorics, III*
- 8:00 a.m. — 10:50 a.m. *Arithmetic Geometry and Modular Forms, III*
- 8:00 a.m. — 10:50 a.m. *Field Extensions and Algorithms, III*
- 8:00 a.m. — 10:50 a.m. *New Developments in Symplectic Topology, II*
- 8:00 a.m. — 10:50 a.m. *Nonautonomous Discrete Dynamics, III*
- 8:00 a.m. — 5:00 p.m. **ASL INVITED ADDRESSES AND CONTRIBUTED PAPERS**
- MAA CONTRIBUTED PAPER SESSIONS**
- 8:00 a.m. — 10:55 a.m. *Countering "I Can't Do Math": Strategies for Teaching Underprepared, Math-Anxious Students, II*
- 8:00 a.m. — 10:55 a.m. *Models That Work: Building Diversity in Advance Mathematics*
- 8:00 a.m. — 10:55 a.m. *Strategies to Encourage Persistence in Mathematics*
- 8:00 a.m. — 10:55 a.m. *Introductory Actuarial Science Programs*
- 8:00 a.m. — 10:55 a.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, VII**
- 8:00 a.m. — 5:00 p.m. **SESSIONS OF AMS CONTRIBUTED PAPERS**
- 8:20 a.m. — 4:20 p.m. **AWM WORKSHOP** *This session has several parts listed separately by time in this program. Listed Workshop presentations are open to all JMM participants.*
- 8:30 a.m. — 10:20 a.m. **AWM WORKSHOP: RESEARCH PRESENTATIONS BY RECENT PH.D.S, I**
- 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** *Mathematicians and education reform: A cautionary tale.* **Naomi Fisher**
- 9:00 a.m. — 10:00 a.m. **NAM PANEL DISCUSSION**
- 9:00 a.m. — 10:20 a.m. **MAA CUPM SUBCOMMITTEE ON CURRICULUM RENEWAL ACROSS THE FIRST TWO YEARS PANEL DISCUSSION** *Developing standards for college algebra.*
- 9:00 a.m. — 10:20 a.m. **SIGMAA ON RESEARCH IN UNDERGRADUATE MATHEMATICS EDUCATION PANEL DISCUSSION** *An MAA Notes sampler.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #10: PART B** *A beginner's guide to the scholarship of teaching and learning in mathematics.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #15: PART B** *A novel approach to problem solving.*
- 9:00 a.m. — 11:00 a.m. **MAA MINICOURSE #4: PART B** *Creating interactive workbooks using MS excel.*
- 9:00 a.m. — 12:00 p.m. **EXHIBITS AND BOOK SALES**
- 9:00 a.m. — 12:00 p.m. **EMPLOYMENT CENTER**
- 9:30 a.m. — 11:00 a.m. **MATH ON THE WEB, IV**
- 10:00 a.m. — 10:55 a.m. **NAM BUSINESS MEETING**
- 10:05 a.m. — 10:55 a.m. **MAA INVITED ADDRESS** *Patterns of primes.* **Ben Green**
- 10:30 a.m. — 11:00 a.m. **AWM WORKSHOP: POSTER SESSION WITH PRESENTATIONS FROM WOMEN RECENT PH.D.S AND GRADUATE STUDENTS**
- 11:10 a.m. — 11:40 a.m. **AMS BUSINESS MEETING**
- 11:45 a.m. — 12:15 p.m. **MAA BUSINESS MEETING**
- 1:00 p.m. — 1:50 p.m. **NAM CLAYTOR-WOODARD LECTURE** *Speaker and title to be announced*
- 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Calculus for those students who have had calculus.*
- 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Evaluating curricular effectiveness: Judging the quality of K–12 mathematics evaluations.*
- 1:00 p.m. — 2:20 p.m. **MAA PANEL DISCUSSION** *Student research programs.*
- 1:00 p.m. — 2:15 p.m. **AWM WORKSHOP: CAREERS PANEL DISCUSSION**
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #11: PART B** *Teaching a course in the history of mathematics.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #16: PART B** *Fair division: From cake-cutting to dispute resolution.*
- 1:00 p.m. — 3:00 p.m. **MAA MINICOURSE #5: PART B** *Finite group behavior: Windows software for teaching beginning group theory.*
- 1:00 p.m. — 5:50 p.m. **AMS-MAA-SIAM SPECIAL SESSION ON RESEARCH IN MATHEMATICS BY UNDERGRADUATES, II**
- 1:00 p.m. — 5:50 p.m. **AMS-MAA-SIAM SPECIAL SESSION ON RECENT ADVANCES IN MATHEMATICAL BIOLOGY AND EPIDEMIOLOGY, II**
- 1:00 p.m. — 5:50 p.m. **AMS-MAA SPECIAL SESSION ON THE HISTORY OF MATHEMATICS, II**
- AMS-SIAM SPECIAL SESSIONS**
- 1:00 p.m. — 5:50 p.m. *Boundary Value Problems for Ordinary Differential Equations, II*
- 1:00 p.m. — 5:50 p.m. *Theory and Application of Stochastic Differential Equations, II*
- 1:00 p.m. — 5:50 p.m. *Stochastic, Large Scale and Hybrid Systems with Applications, I*
- 1:00 p.m. — 5:50 p.m. *Symbolic Numeric Computation and Applications, II*
- 1:00 p.m. — 5:50 p.m. *Reversal Methods: Analysis and Applications, II*
- 1:00 p.m. — 5:50 p.m. *Contemporary Dynamical Systems, III*

AMS SPECIAL SESSIONS

1:00 p.m. — 5:50 p.m. *Quantum Invariants of Knots and 3-Manifolds, II*
1:00 p.m. — 5:50 p.m. *Invariant Theory*

1:00 p.m. — 5:55 p.m. **MAA GENERAL CONTRIBUTED PAPER SESSION, VIII**

2:30 p.m. — 3:50 p.m. **MAA CUPM SUBCOMMITTEE ON CURRICULUM RENEWAL ACROSS THE FIRST TWO YEARS
PANEL DISCUSSION** *Reunion of participants in refocused college algebra.*

2:30 p.m. — 4:20 p.m. **AWM WORKSHOP: RESEARCH PRESENTATIONS BY RECENT PH.D.S, II**

3:30 p.m. — 5:30 p.m. **MAA MINICOURSE #6: PART B** *Technology tools for discrete mathematics.*

6:30 p.m. — 7:30 p.m. **AMS BANQUET RECEPTION**

7:30 p.m. — 10:30 p.m. **AMS BANQUET**