MAA Student Chapters

The MAA Student Chapters program was launched in January 1989 to encourage students to continue study in the mathematical sciences, provide opportunities to meet with other students interested in mathematics at national meetings, and provide career information in the mathematical sciences. The primary criterion for membership in an MAA Student Chapter is "interest in the mathematical sciences." Thus, the Student Chapter program supplements, but does not compete with, the chapters of Pi Mu Epsilon. Currently there are approximately 225 active Student Chapters on college and university campuses nationwide. Students are also members of the MAA Sections in their geographic region. Many of the MAA Sections provide special activities for students at their regularly scheduled meetings.

Pi Mu Epsilon

Pi Mu Epsilon is a national mathematics honor society with over 300 chapters throughout the nation. Established in 1914, Pi Mu Epsilon is a non-secret organization whose purpose is the promotion of scholarly activity in mathematics among students in academic institutions and among staffs of qualified non-academic institutions. It seeks to do this by electing members on an honorary basis according to their proficiency in mathematics and by engaging in activities designed to provide for the mathematical and scholarly development of its members.

Pi Mu Epsilon regularly engages students in scholarly activity through its *Journal* which has published student and faculty articles since 1949. In addition, the society awards monetary prizes for mathematics contests and awards established by chapters.

Since 1952, Pi Mu Epsilon has been holding its annual National Meeting in conjunction with the summer meetings of the Mathematical Association of America (MAA).

Student Activities

Schedule of Events
All events will be held in the Albuquerque Convention Center

Wednesday, August 3

5:30 pm - 6:30 pm	MAA/PME Student Reception	**LOCATION**

Thursday, August 4

8:00 am - 11:30 am	PME Council Meeting	**LOCATION**
9:00 am - 5:00 pm	Student Hospitality Center	**LOCATION**
1:00 pm - 2:55 pm	MAA Session #1	Taos Room
1:00 pm - 2:55 pm	PME Session #1	Picuris Room
1:00 pm - 2:55 pm	MAA Session #2	Cochiti Room
1:00 pm - 2:55 pm	PME Session #2	Santa Ana Room
3:00 pm - 4:55 pm	MAA Session #3	Taos Room
3:00 pm - 4:55 pm	PME Session #3	Picuris Room
3:00 pm - 4:55 pm	MAA Session #4	Cochiti Room
3:00 pm - 4:55 pm	PME Session #4	Santa Ana Room
5:00 pm - 5:45 pm	MAA Special Session on *Math Horizons*	**LOCATION**
	Arthur T. Benjamin, Harvey Mudd College	
	Jennifer J. Quinn, Occidental College	

Friday, August 5

8:00 am - 11:30 am	PME Council Meeting	**LOCATION**
9:00 am - 5:00 pm	Student Hospitality Center	**LOCATION**
1:00 pm - 2:55 pm	MAA Session #5	Taos Room
1:00 pm - 2:55 pm	PME Session #5	Picuris Room
1:00 pm - 2:55 pm	MAA Session #6	Cochiti Room
1:00 pm - 2:55 pm	PME Session #6	Santa Ana Room
3:00 pm - 5:35 pm	MAA Session #7	Taos Room
3:00 pm - 4:55 pm	PME Session #7	Picuris Room
3:00 pm - 5:35 pm	MAA Session #8	Cochiti Room
3:00 pm - 4:55 pm	PME Session #8	Santa Ana Room
6:00 pm - 7:45 pm	PME Banquet	**LOCATION**
8:00 pm - 9:00 pm	J. Suthlerland Frame Lecture	**LOCATION**
	Arthur T. Benjamin, Harvey Mudd College	
	Proofs that Really Count:	
	The Art of Combinatorial Proof	

Saturday, August 6

9:00 am - 2:00 pm	Student Hospitality Center	**LOCATION**
1:00 pm - 2:50 pm	MAA Student Workshop	**LOCATION**
	John Harris	
	Walking on Long Paths	
3:00 pm - 3:50 pm	MAA Student Lecture	**LOCATION**
	Annalisa Crannell, Franklin & Marshall College	
	Marc Frantz, Indiana University	

MAA Student Lecture

Saturday, August 6, 2005
3:00 - 3:50 pm
LOCATION

LIGHTS, CAMERA, FREEZE!
Annalisa Crannell
Franklin & Marshall College
Marc Frantz
Indiana University

Director/Producer Stephen "Marc" Frantzberg teams up with the world-famous actress Annalisa Monalisa Cranberry to bring you the new blockbuster hit, Projection. Spanning the centuries between Renaissance perspective painting and modern cinematic special effects, Projection reveals the true secrets behind projecting a 3-dimensional world onto a 2-dimensional canvas (or movie screen). You'll laugh; you'll yawn; you'll cry; you'll reach the vanishing point. The movie includes a cast of thousands (or dozens, depending on how many people are in the audience).

J. Sutherland Frame Lecture

Friday, August 5, 2005
8:00 - 9:00 pm
LOCATION

PROOFS THAT REALLY COUNT: THE ART OF COMBINATORIAL PROOF
Arthur T. Benjamin
Harvey Mudd College

Mathematics is the science of patterns, and mathematicians attempt to understand these patterns and discover new ones using various tools. In this talk, we demonstrate that many number patterns, even very complex ones, can be understood by simple counting arguments. You will enjoy the magic of Fibonacci numbers, Lucas numbers, continued fractions, and more. You can count on it! This talk is based on research with Professor Jennifer Quinn and many, many undergraduates.

The J. Sutherland Frame Lecture is named in honor of the ninth President of Pi Mu Epsilon, who served from 1957 to 1966 and passed away on February 27, 1997. In 1952, Sud Frame initiated the student paper sessions at the annual Pi Mu Epsilon meeting, which is held at the Summer Mathfests. He continually offered insight and inspiration to student mathematicians at these summer meetings.

MAA Student Speakers

Speakers

Name	MAA Session	Name	MAA Session
LastName FirstName	1	name	1
Askew Ashley	1	name	1
Croll Nicholas	1	name	1
Eisemann Elizabeth	1	name	1
Fritsch Sarah	1	name	1
Gemmer John	1	name	1
Goodpaster Sarah	1	name	1
Johnson Nicholas	1	name	1
Mauck Melissa	1	name	1
Mitchell Benjamin	1	name	1
O'Connell Nicole	1	name	1
Oparanozie Nnamdi	1	name	1
Otten Samuel	1	name	1
Paquette Ammon	1	name	1
Rivas Mauricio	1	name	1
Smith Chris	1	name	1
Toombs Nicholas	1	name	1

Pi Mu Epsilon Delegates

Speakers

Name	School	Chapter	PME Session
Julian Apelete Allagan	Troy University	AL Eta	1
Chantel C. Blackburn	Andrews University	MI Gamma	1
Dakota Blair	Texas A&M University	TX Eta	1
Jason Brinker	St. Norbert College	WI Delta	1
Angela Brown	Sam Houston State University	TX Epsilon	1
Jennifer L. Carmichael	Western Oregon University	OR Delta	1
Christopher Cicotta	Clarkson University	NY Omicron	1
Tom Cochran	Youngstown State University	OH Xi	1
Stephanie Deacon	University of Texas at San Antonio	TX Omicron	1
Patrick Dixon	Occidental College	CA Theta	1
David Gohlke	Youngstown State University	OH Xi	1
Jeff Goldsmith	Dickinson College	PA Rho	1
Angela Hicks	Furman University	SC Delta	1
Amanda Hoffman	Sam Houston State University	TX Epsilon	1
Alaina Houmard	Mount Union College	OH Omicron	1
Colleen Hughes	Denison University	OH Iota	1
Aubrey Komorowski	Duquesne University	PA Upsilon	1
Mark Lane	Sam Houston State University	TX Epsilon	1
David Martin	Youngstown State University	OH Xi	1
Andrew Matteson	Texas A&M University	TX Eta	1
Tina Smith Mote	McNeese State University	LA Epsilon	1
Phuong Minh Thi Nguyen	Occidental College	CA Theta	1
Jackie Van Ryzin	St. Norbert College	WI Delta	1
Maria Salcedo	Youngstown State University	OH Xi	1
Ted Stadnik	Youngstown State University	OH Xi	1
Jennifer Swank	Denison University	OH Iota	1
Carrie Swauger	Duquesne University	PA Upsilon	1
Elizabeth Ann Tiedeman	Duquesne University	PA Upsilon	1

Additional Delegates

Michele J. Kneale	University of Akron	Ohio Nu
Doyle G. LaCroix, Jr.	Southeastern Louisiana University	Louisiana Delta
Margaret Smoot	Texas A&M University	Texas Eta
Dillon McTernan	Southeastern Louisiana University	Louisiana Delta
William Paul	University of North Carolina at Charlotte	North Carolina Theta
Darshit J. Patel	University of South Florida	Florida Epsilon

PME Session #1

Picuris Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

A Generalization of the Chromatic Polynomial of a Cycle

Julian Apelete Allagan
Troy University, Alabama Eta

We prove that if an edge of a cycle on n vertices is extended by adding k vertices, then the chromatic polynomial of such generalized cycle is:

$$P(H_k, \lambda) = (\lambda - 1)^n \sum_{i=0}^{k} \lambda^i + (-1)^n (\lambda - 1)$$

1:20–1:35

Finite and Infinite Configurations in the Hausdorff Metric Geometry

Chantel C. Blackburn
Andrews University, Michigan Gamma

The Hausdorff metric provides a way to measure distance between any two non-empty compact subsets of n-dimensional Euclidean space. A configuration in this space defines two compact sets and the number of sets at each location between the sets. We will focus on finite and infinite configurations and how a small change to a configuration can lead to a drastically different result in the number of sets at each location between sets.

1:40–1:55

Impossible Paths in Langton's Ant

Dakota Blair
Texas A&M University, Texas Eta

A new characterization of a path (as a word) provides insight into the study of paths produced by many ant-like automata. Impossible words and the construction of a possibility testing algorithm are presented. Additionally, for possible words, this algorithm provides the conditions required for the ant to produce this path.

2:00–2:15

Let Me Do a Little Number

Jason Brinker
St. Norbert College, Wisconsin Delta

The interconnectedness of mathematics and music has long been discussed by professionals in both fields. In the analysis and composition of music, mathematics is used constantly. In fact, in the 20th century, musical set theory and the Twelve-Tone movement utilized mathematics as a foundation. We will examine these two movements as well as discuss a method of composition developed by the speaker himself.

2:20–2:35

Which Mathematical Knots Are Celtic?

Angela Brown
Sam Houston State University, Texas Epsilon

Using a mathematical definition of a Celtic knot, we will attempt to show which knots are indeed Celtic. Celtic knots are obtained from an alternating rectangular grid pattern by changing crossings to vertical or horizontal uncrossings. The existence of identifying characteristics to distinguish Celtic and non-Celtic knots will be explored.

MAA Session #1

Taos Room   **1:00P.M. – 2:55P.M.**
1:00–1:15

Drawing Graphs ... Algorithms
Brian Black
Providence College – Rhode Island Gamma

We describe ... logic humans use to draw graphs.
1:20–1:35

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PME Session #2

Santa Ana Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

Can You or Can't You Count Cantor?

Jennifer L. Carmichael

Western Oregon University, Oregon Delta

One of the most counterintuitive mathematical objects, the Cantor set, seems riddled with contradictions. This introduction to the Cantor set (a subset of the open interval from 0 to 1) will discuss some of these contradictions, including the ternary-expansion proof that answers whether we can count this elusive set.

1:20–1:35

Intrinsically Linked, Outerplanar, and Outerflat Graphs

Christopher Cicotta

Clarkson University, New York Omicron

A graph G is outerflat if it can be embedded in a 3-ball, such that every vertex of G lies on the boundary of the 3-ball, and such that every cycle of G bounds a disk in the 3-ball disjoint from G. We will discuss the classification of all outerflat graphs.

1:40–1:55

Math with Muscle

Tom Cochran

Youngstown State University, Ohio Xi

Smooth muscles are found throughout our bodies and are extremely important in regulating blood flow in arteries and veins. This talk will touch upon some of the mathematics discovered in experimental data acquired through a bio-mathematics project dealing with the relaxation of smooth muscles at Youngstown State University.

2:00–2:15

Key Generation of a Group-Oriented, Threshold Cryptosystem

Stephanie Deacon

University of Texas at San Antonio, Texas Omicron

In a (k, n)-threshold public key cryptosystem the group members choose their private key such that no member has knowledge of the private key. However, k members can recover this private key. This scheme will be implemented in the field of integers modulo a prime, p, and generalized for any finite field.

2:20–2:35
Epidemiological Modeling of STDs Using Graph Theory
Patrick Dixon
Occidental College, California Theta

In recent years, increased attention has been given to the topic of obtaining exact solutions to disease models using the graph of contacts between people. This presentation will focus on using the known transmission and infection characteristics of certain STDs to predict transmission patterns within specified populations.

MAA Session #2

Cochiti Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

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PME Session #3

Picuris Room   **3:00P.M. – 4:55P.M.**

3:00–3:15

Modeling Bacterial Growth in the Presence of Toxins

David Gohlke

Youngstown State University, Ohio Xi

Environmental factors such as the amount of available nutrients of the presence of toxins play a large role in bacterial growth. Some strains of bacteria have the ability to survive in environments in which other strains would not. This presentation will focus on modeling growth curves of bacteria in different situations, with the intent of finding accurate mathematical models. This research was undertaken in the SURE program at Youngstown State University, sponsored by the National Science Foundation.

3:20–3:35

Convergence Properties of the Riemann Integral

Jeff Goldsmith

Dickinson College, Pennsylvania Rho

We will begin by examining sequences of real numbers and look at what it means for a sequence to converge. This will lead us naturally to a discussion about sequences of functions, and two ways to define convergence for sequences of functions. Because no one can resist integrating a function, we will conclude with the Riemann Integral for the limit of sequences.

3:40–3:55

Applications of Lie Symmetry Groups to Minimal Surfaces

Angela Hicks

Furman University, South Carolina Delta

A system of differential equations can be represented as an n-dimensional Lie group which is a smooth n-manifold that is also an algebraic group. By computing the symmetries of this Lie group, we are able to find a continuous family of solutions to the original system of differential equations. We apply this method to the study of minimal surfaces which are surfaces whose mean curvature is zero and which can be represented by differential equations. This provides us with examples of families of surfaces that smoothly flow from one minimal surface to another.

4:00–4:15

It's More Than Nothing

Amanda Hoffman

Sam Houston State University, Texas Epsilon

It was many centuries after the development of natural numbers before any culture saw the need for zero and began to use it as a placeholder and as a number. We will look at the development and acceptance of zero throughout history.

4:20–4:35

Selecting Small Groups in College Courses

Alaina Houmard

Mount Union College, Ohio Omicron

Conflicting schedules, ability, and interest among group members can affect the overall performance of a group. I will discuss how Multidimensional Scaling can be used to obtain optimal groups.

MAA Session #3

Taos Room   **3:00P.M. – 4:55P.M.**
3:00–3:15

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4:40–4:55

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PME Session #4

Santa Ana Room   **3:00P.M. – 4:55P.M.**

3:00–3:15

A New Approach to Multiple Bubble Problems

Colleen Hughes

Denison University, Ohio Iota

It has long been known that a circular fence is the most efficient enclosure of a single quantity of area, and that a spherical bubble has the least surface area among all shapes of a given volume. In the early 1990's, proofs were developed for double or triple bubbles in the plane, three-space, and in other spaces. Here we present research from our REU group which extends this work on multiple bubble problems.

3:20–3:35

Independence Models, Likelihood Ratio Tests, and a Side of Bacon

Aubrey Komorowski

Duquesne University, Pennsylvania Upsilon

The game PASS THE PIGS requires a player to roll a pair of pig-shaped dice. The configuration of the rolled pigs determines points earned. Data collected from thousands of such rolls from different heights are used in conjunction with multinomial independence models to examine height effect. Likelihood ratio tests are used to compare competing independence models and reveal the most plausible dependence relations.

3:40–3:55

An Introduction to Franklin Squares

Mark Lane

Sam Houston State University, Texas Epsilon

This talk will give an introduction to Franklin Squares. We will determine algebraic relationships that exist among the properties that define a Franklin Square. Finally, we will describe all known symmetry operations on Franklin Squares.

4:00–4:15

An Alternate Demonstration of Euler's Formula

David Martin

Youngstown State University, Ohio Xi

Euler's formula, one of the most intriguing discoveries in the history of mathemat-

ics, shows that the exponential and seemingly unrelated sine and cosine functions are indeed fundamentally linked. One popular method of proving the formula involves power series representations. Another involves differential equations. This presentation will include an alternate demonstration requiring only an understanding of calculus.

4:20–4:35
Symmetry in a Modular Generalization of Schur's Problem
Andrew Matteson
Texas A&M University, Texas Eta
We consider Schur's well-known open problem of sum-free sets. Some relations to classical results, applications to Ramsey theory, backtrack programming, and generalizations of the problem are presented. Primarily, we focus on the ideas of symmetry and anti-symmetry and their applications to modular sum-free partitions.

MAA Session #4

Cochiti Room   **3:00P.M. – 4:55P.M.**

3:00–3:15

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4:40–4:55

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PME Session #5

Picuris Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

Exploring Groups with Perfect Order Subsets (POS)
Tina Smith Mote
McNeese State University, Louisiana Epsilon

The order subset of an element x in a group G is defined to be the set of all elements in G with the same order as x. A finite group is said to have POS if the cardinality of each order subset divides the order of the group. Previously established results regarding groups with POS will be discussed and illustrated by examples. In addition, special classes of groups with POS will be characterized.

1:20–1:35

"The Kingdom Lost For A Smile" from a Theoretical Perspective
Phuong Minh Thi Nguyen
Occidental College, California Theta

This paper studies an intersection between game theory and history to illustrate the wide range of applications of game theory. Despite the tendency to take history for granted, this research illuminates one specific ancient Chinese historical event to emphasize the main factors leading to a turning point in early Chinese history. Moreover, it presents some elements that could turn the outcome of the event and therefore Chinese history the other way and a useful lesson for leadership.

1:40–1:55

Sumthing Special: The N Festivals of Whatever
Jackie Van Ryzin
St. Norbert College, Wisconsin Delta

We're all familiar with the song about the Twelve Days of Christmas. We will discuss some efficient ways of determining the total number of gifts given and then generalize to a much wider variety of festive occasions and levels of festivities.

2:00–2:15

An Introduction to Knot Theory
Maria Salcedo
Youngstown State University, Ohio Xi

This talk will be a concise introduction to general concepts in knot theory. Math-

ematical research of knotted ribbons will also be discussed.

MAA Session #5

Taos Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

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2:00–2:15

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2:20–2:35

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PME Session #6

Santa Ana Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

An Analytical Anomaly
Ted Stadnik
Youngstown State University, Ohio Xi

Continued fractions can be used to create sequences of continuous functions that converge pointwise to a function with a countably infinite number of discontinuities. Variations of this problem and open questions will be considered.

1:20–1:35

The Bus Driver's Sanity Problem
Jennifer Swank
Denison University, Ohio Iota

The Bus Driver's Sanity Problem, introduced by Will (1999), is to determine the best route for the drop off of kids so as to minimize exposure to the children, measured in kid-minutes. Will's solution approach, along with two possible heuristic approaches and continuing research will be presented.

1:40–1:55

An Analysis of Mathematical Models for Image Inpainting
Carrie Swauger
Duquesne University, Pennsylvania Upsilon

Modern technology has created a fundamental need to accurately and efficiently obtain, store, transmit, and recover data. However, these processes often result in the loss of critical information. Digital image inpainting is becoming an increasingly popular technique for automatically filling in lost information in images. In this talk we analyze and compare fundamental properties of several inpainting models based on partial differential equations.

2:00–2:15

A Price Prediction Model for Building Blocks
Elizabeth Ann Tiedeman
Duquesne University, Pennsylvania Upsilon

Accompanying the prices of LEGO sets displayed in the online and paper catalogs are the number of corresponding pieces in each set. Using catalog data, we implement a least-squares regression model to predict the price of a LEGO set as

a function of its piece count and estimate price-per-piece. Additional predictors, such as genre, are included to enhance predictive ability and better understand pricing strategy.

MAA Session #6

Cochiti Room   **1:00P.M. – 2:55P.M.**

1:00–1:15

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1:20–1:35

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1:40–1:55

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2:00–2:15

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2:20–2:35

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PME Session #7

Picuris Room   **3:00P.M. – 4:55P.M.**

3:00–3:15

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3:20–3:35

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3:40–3:55

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4:00–4:15

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4:20–4:35

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MAA Session #7

Taos Room   **3:00P.M. – 5:35P.M.**
3:00–4:30

Drawing Graphs ... Algorithms
Brian Black
Providence College – Rhode Island Gamma

We describe ... logic humans use to draw graphs.
4:35–5:35

Drawing Graphs ... Algorithms
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Providence College – Rhode Island Gamma

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PME Session #8

Santa Ana Room   **3:00P.M. – 4:55P.M.**
3:00–3:15

Drawing Graphs ... Algorithms
Brian Black
Providence College – Rhode Island Gamma

We describe ... logic humans use to draw graphs.
3:20–3:35

Drawing Graphs ... Algorithms
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Providence College – Rhode Island Gamma

We describe ... logic humans use to draw graphs.
3:40–3:55

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Providence College – Rhode Island Gamma

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4:00–4:15

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Providence College – Rhode Island Gamma

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4:20–4:35

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Providence College – Rhode Island Gamma

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4:40–4:55

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MAA Session #8

Cochiti Room   **3:00P.M. – 5:35P.M.**

3:00–3:15

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3:20–3:35

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4:40–4:55

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J. Suthlerland Frame Lectures

2005	Arthur T. Benjamin	*Proofs that Really Count: The Art of Combinatorial Proof*
2004	Joan P. Hutchinson	*When Five Colors Suffice*
2003	Robert L. Devaney	*Chaos Games and Fractal Images*
2002	Frank Morgan	*Soap Bubbles: Open Problems*
2001	Thomas F. Banchoff	*Twice as Old, Again, and Other Found Problems*
2000	John H. Ewing	*The Mathematics of Computers*
1999	V. Frederick Rickey	*The Creation of the Calculus: Who, What, When, Where, Why*
1998	Joseph A. Gallian	*Breaking Drivers' License Codes*
1997	Philip D. Straffin, Jr.	*Excursions in the Geometry of Voting*
1996	J. Kevin Colligan	*Webs, Sieves and Money*
1995	Marjorie Senechal	*Tilings as Differential Gratings*
1994	Colin Adams	*Cheating Your Way to the Knot Merit Badge*
1993	George Andrews	*Ramanujan for Students*
1992	Underwood Dudley	*Angle Trisectors*
1991	Henry Pollack	*Some Mathematics of Baseball*
1990	Ronald L. Graham	*Combinatorics and Computers*
1989	Jean Cronin Scanlon	*Entrainment of Frequency*
1988	Doris Schattschneider	*You Too Can Tile the Conway Way*
1987	Clayton W. Dodge	*Reflections of a Problems Editor*
1986	Paul Halmos	*Problems I Cannot Solve*
1985	Ernst Snapper	*The Philosophy of Mathematics*
1984	John L. Kelley	*The Concept of Plane Area*
1983	Henry Alder	*How to Discover and Prove Theorems*
1982	Israel Halperin	*The Changing Face of Mathematics*
1981	E. P. Miles, Jr.	*The Beauties of Mathematics*
1980	Richard P. Askey	*Ramanujan and Some Extensions of the Gamma and Beta Funct*
1979	H. Jerome Keisler	*Infinitesimals: Where They Come From and What They Can Do*
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1977	Ivan Niven	*Techniques of Solving Extremal Problems*
1976	H. S. M. Coxeter	*The Pappus Configuration and Its Groups*
1975	J. Sutherland Frame	*Matrix Functions: A Powerful Tool*

MAA Student Lectures

2005	Annalisa Crannell & Marc Frantz	*Lights, Camera, Freeze!*
2004	Mario Martelli	*The Secret of Brunelleschi's Cupola*
2004	Mark Meerschaert	*Fractional Calculus with Applications*
2003	Arthur T. Benjamin	*The Art of Mental Calculation*
2003	Donna L. Beers	*What Drives Mathematics and Where is Mathematics Driving Innovation?*
2002	Colin Adams	*"Blown Away: What Knot to do When Sailing" by Sir Randolph "Skipper" Bacon III*
2002	M. Elisabeth Pate-Cornell	*Finding and Fixing Systems' Weaknesses: The Art and Science of Engineering Risk Analys*
2001	Rhonda Hatcher	*Ranking College Football Teams*
2001	Ralph Keeney	*Building and Using Mathematical Models to Guide I*
2000	Michael O'Fallon	*Attributable Risk Estimation: A Tale of Mathematical/Statistical Modeling*
2000	Thomas Banchoff	*Interactive Geometry on the Internet*
1999	Edward G. Dunne	*Pianos and Continued Fractions*
1999	Dan Kalman	*A Square Pie for the Simpsons and Other Mathemati*
1998	Ross Honsberger	*Some Mathematical Morsels*
1998	Roger Howe	*Some New and Old Results in Euclidean Geometry*
1997	Aparna Higgins	*Demonic Graphs and Undergraduate Research*
1997	Edward Schaefer	*When is an Integer the Product of Two and Three Consecutive Integers?*
1996	Kenneth Ross	*The Mathematics of Card Shuffling*
1996	Richard Tapia	*Mathematics Education and National Concerns*
1995	David Bressoud	*Cauchy, Abel, Dirichlet and the Birth of Real Analys*
1995	William Dunham	*Newton's (Original) Method - or - Though This Be Method, Yet There is Madness*
1994	Gail Nelson	*What is Really in the Cantor Set?*
1994	Brent Morris	*Magic Tricks, Card Shuffling and Dynamic Computer Memories*
1993	Richard Guy	*The Unity of Combinatorics*
1993	Joseph Gallian	*Touring a Torus*
1992	Peter Hilton	*Another Look at Fibonacci and Lucas Numbers*
1992	Caroline Mahoney	*Contemporary Problems in Graph Theory*
1991	Lester Lange	*Desirable Scientific Habits of Mind Learned from Ge*