Invited Addresses

a

Annual and Fall Meetings

Meeting ng Chairman/President ing Award Recipient R. B. Allen* Kenyon C.	"Hypercomplex Number Systems"
T. M. Focke* Case School Appl. Sci.	"A Geometrical Presentation of Taylor's Series"
Forbes B. Wiley* Denison U.	"An Experiment with Co-ordinates"
C. N. Moore* U. of Cincinnati	"The Role of Mathematics in World Progress"
R. L. Borger* Ohio U.	"Some Geometric Methods for Curve Tracing"
Samuel E. Rasor* Ohio State U.	"Functions and Functionals"
M. Gugle Columbus Public Schools	"The High School-College Problem"
D. L. Holl Ohio State U.	"The Mathematical Justification of a Fundamental Postulate of the Theory of Relativity"
B. F. Yanney* C. of Wooster	"Some Aspects of the Mathematical Situation in Ohio"
H. L. Coar* Marietta C.	"Freshman Mathematics in the Liberal Arts College"
W. E. Anderson* Miami U.	"Some Methods of Creating and Maintaining Interest in Mathematics"
E. E. Lincoln Western Electric Co.	"Business Statistics"
Harris Hancock* U. of Cincinnati	"A Notion Which Includes That of Divisibility"
R. D. Bohannan* Ohio State U.	"Alphabetic Symbolism Applied to Some Operations on Power Series"
H. W. Kuhn* Ohio State U.	"Galois Fields and Permutation Groups"
H. W. Sibert U. of Cincinnati	"A New Type of Singular Solution"
C. H. Yeaton* Oberlin C.	"The Construction of the Tangent to Certain Curves"
E. H. Clarke* Hiram C.	"Problem Solving and Mathematical Progress"
	ng Chairman/President ing Award Recipient R. B. Allen* Kenyon C. T. M. Focke* Case School Appl. Sci. Forbes B. Wiley* Denison U. C. N. Moore* U. of Cincinnati R. L. Borger* Ohio U. Samuel E. Rasor* Ohio State U. M. Gugle Columbus Public Schools D. L. Holl Ohio State U. B. F. Yanney* C. of Wooster H. L. Coar* Marietta C. W. E. Anderson* Miami U. E. E. Lincoln Western Electric Co. Harris Hancock* U. of Cincinnati R. D. Bohannan* Ohio State U. H. W. Kuhn* Ohio State U. H. W. Sibert U. of Cincinnati C. H. Yeaton* Oberlin C. E. H. Clarke*

	A. F. Petersilge Shaker Heights Pub. Sch.	"Elementary and Secondary Mathematics Essential for Success in College Mathematics"
1930	G. Y. Rainich U. of Michigan	"Linear Vector Functions, their Applications and Generalizations"
	S. A. Rowland* Ohio Wesleyan U.	"The Solutions of a System of Linear Homogeneous Differential Equations with Laurent Coefficients"
1931	W. G. Simon* Western Reserve U.	"Some Doubts About the Content of Elementary Courses in Calculus"
1932	W. D. Cairns* Oberlin C.	"An Undergraduate Course Leading to the Study of Wave Mechanics"
	E. S. Loomis Baldwin-Wallace C.	"A Trihedron and its Genesis"
	C. L. Weaver Kent State U.	"A Proof of the Rule for Evaluating an Indeterminate Form"
1933	H. T. Davis Indiana U.	"The Predictable Element in Economic Series"
	O. L. Distheimer* Baldwin-Wallace C.	"Applied Mathematics in a Liberal Arts College"
1934	I. A. Barnett* U. of Cincinnati	"Some Suggestions for the Improvement of the Teaching of Mathematics"
	K. P. Williams Indiana U.	"The Problem of Professional Training"
1935	H. Blumberg* Ohio State U.	"On the Change of Form"
	E. J. Moulton Northwestern U.	"The Training and Utilization of Advanced Students of Mathematics"
	B. O. Skinner Ohio Dept. of Ed.	"On the Teaching of Mathematics in the Secondary Schools"
	G. Szegö Washington U.	"Some Recent Applications of Sturm's Oscillation Method"
1936	J. Pierce* Heidelberg C.	"Solutions of Systems of Linear Differential Equations in the Vicinity of Singular Points"
1937	J. H. Weaver* Ohio State U.	"A Generalization of the Circles of Apollonius and Some Resulting Properties"
1938	O. E. Brown* Case School Appl. Sci.	"The Application of Determinants and Projective Transformations to Nomography"
	K. Menger Notre Dame U.	"The Foundations of Projective and Affine Geometry"
1939	G. A. Bliss U. of Chicago	"The Hamilton-Jacobi Theory in the Calculus of Variations and its Sources"

	C. O. Williamson* C. of Wooster	"Why I Teach Mathematics"
1940	E. Artin Indiana U.	"Introduction of Coordinates in Affine Geometry"
	W. Dancer* U. of Toledo	"Fundamental Concepts in Undergraduate Mathematics"
1941	G. A. Miller U. of Illinois	"Mathematical Statements in the History of Mathematics"
	J. R. Musselman* Western Reserve U.	"Aerial Photogrammetry"
1942	Louis Brand* U. of Cincinnati	"Non-Metric Differential Invariants"
	Lester R. Ford Illinois Inst. of Tech.	"A Million Ways to Solve Equations"
1943	C. T. Bumer* Kenyon C.	"The Pre-Meterological Training Program: an Experiment and a Challenge"
1944	Tibor Radó* Ohio State U.	"On Triangulation"
1946	J. B. Brandeberry* U. of Toledo	"Imaginary Branches of Real Curves"
	F. D. Murnaghan Johns Hopkins U.	"The Teaching of College Mathematics"
1947	Tibor Radó* Ohio State U.	"Intuition in Mathematics"
	S. A. Rowland* Ohio Wesleyan U.	"The Association's Interest in Pre-College Training"
1948	M. Hall, Jr. Ohio State U.	"Prospects in Projective Geometry"
	H. S. Pollard* Miami U.	"The Mathematics Major"
1949	R. H. Marquis* Ohio U.	"Some Current Questions in the Administration of College Mathematics"
	E. J. Mickle Ohio State U.	"Some Questions in Metric Geometry"
1950	E. Baiade U. of Pisa	"Some Modern Italian Mathematicians"
	E. P. Vance * Oberlin C.	"A Different Approach to the Study of Circular Functions"
1951	A. Schild Carnegie Inst. Tech.	"Interactions of Modern Mathematics and Modern Physics"

V. C. Stechschulte * "Some Mathematics in Seismology" Xavier U. L. I. Davis "Some Mathematical Problems Encountered in Research and 1952 U.S.A.F. Development Work" R. F. Rinehart* "Functions of Matrices" Case Inst. Tech. Hanry B. Mann 1953 "Combinatorial Problems" Ohio State U. Earl F. Mickle * "Mappings and Measure" Ohio State U. P. R. Rider * 1954 "Statistical Distributions" Wright-Patterson A.F.B. G. deB. Robinson "The Place of Algebra and Geometry in the Undergraduate U. of Toronto Curriculum" R. R. Stoll 1955 "Characteristics of Determinant Functions" Oberlin C. W. R. Transue * "Approaches to Measure and Integration" Kenyon C. H. E. Grime "Some Current Problems of Teachers of 1956 Cleveland Pub. Sch. Mathematics in Elementary and Secondary Schools" **Ernst Snapper** "The Geometric Method in Modern Algebra" Miami U. R. R. Stoll * "Sperner's Lemma" Oberlin C. A. Church 1957 "Synthesis of Electric Circuits as a Problem in Mathematical Princeton U. Logic" Paul V. Reichelderfer * "On the Geometrical Meaning of a Derivative" Ohio State U N. Lazar "Critique on the Preparation of Elementary and Secondary School 1958 Ohio State U. Teachers of Mathematics" E. R. Ranucci "Report from the Commission on Mathematics of the College Newark State C. Entrance Board" J. Laurie Snell "The New Dartmouth Mathematics Curriculum" Dartmouth C. G. Blanch 1959 "Review of Basic Concepts in Approximation Theory" Wright-Patterson A.F.B. L. E. Bush* "Some Problems in Teacher Training and Retraining" Kent State U. R. J. Nelson "The Impact of the Electronic Computer on the Mathematics Case Inst. Tech. Curriculum"

	D. Ransom Whitney Ohio State U.	"The Role of a Statistics Laboratory on a College Campus"
1960	S. N. Gupta Wayne State U.	"A Procedure for Optimizing a Function Involving Uncertain Parameters"
	W. R. VanVoorhis * Fenn C.	"The Impact of Modern Mathematics Upon College Teachers"
1961	Wade Ellis * Oberlin C.	"On Boolean Algebras"
	Charles Saltzer U. of Cincinnati	"Computers and Automata"
1963	W. G. Johnson * Hiram C.	"Topological Representations of Certain Boolean Algebras"
	Arnold E. Ross U. of Notre Dame	"An Intractable Minimum Problem in Diophantine Approximation"
1964	R. H. Bing U. of Wisconsin	"Homogeneity"
	C. E. Capel * Miami U.	"Concrescence, Concinnity, and Concatenation"
1965	Andrew Sterrett* Denison U.	"The Negative Binomial Distribution for Testing Certain Hypotheses"
	R. L. Wilder U. of Michigan	"The Axiomatic Method"
1966	W. T. Fishback * Ohio U.	"The High Costs of Trying"
	M. Henriksen Case Inst. Tech.	"Matrices Over Rings in Which Finitely Generated Ideals are Principal"
1967	H. David Lipsich * U. of Cincinnati	"Some New Directions for the Ohio Section"
	J. Mycielski Case Inst. Tech.	"Topics in Mathematical Logic"
F67	Richard D. Anderson Louisiana State U.	"A Brief Survey of CUPM Activities"
	Donald W. Bushaw Washington State U.	"Preparation for Graduate Study in Mathematics"
	W. Prenowitz Brooklyn C.	"Preparation for Graduate Study in Geometry"
	G. Bailey Price U. of Kansas	"A General Curriculum in Mathematics for Colleges"
	A. Rosenberg Cornell U.	"The CUPM Qualification Report"

G. L. Weiss "Preparation for Graduate Study in Analysis" Washington U. Hans J. Zassenhaus "Preparation for Graduate Study in Algebra" Ohio State U. "Language as a Part of Mathematics: E. Engeler 1968 Part 1, Model Theory; U. of Minnesota Part 2, Symbol Manipulation" Daniel T. Finkbeiner * "The Mergences of Mathematics" Kenyon C. Ralph P. Boas 1969 "COSRIMS: Findings and Recommendations of the Graduate Northwestern U. Panel" Peter J. Hilton "COSRIMS: Problems of Implementation of Recommendations" Cornell U. Henry O. Pollack "COSRIMS: Findings and Recommendations of the Undergraduate Bell Telephone Labs Panel" Arnold E. Ross * "Graduate Training in Mathematics: Some Dilemmas of a Ohio State U. Practicing Educator" A. F. Bartholomay 1970 "The Role of Mathematics in Biology and Medicine" Med. C. of Ohio-Toledo James L. Smith * "Swingin' 60's - 70's" Muskingum C. I: "Calculus and the Computer: A Very Short Course in Computing; W. Sternberg U. of Minnesota II: The Role of the Computer in the CRICISAM Calculus Course" Victor Klee 1971 "Convex Sets in Geometry and Analysis" U. of Washington Ben Noble "Applications of Undergraduate Mathematics" Oberlin C. B. J. Yozwiak* "What You Always Wanted to Know about Summability, but Were Youngstown State U. Not Interested Enough to Ask" "Current and Future State of the Art J. Simons F71 SUNY, Stonybrook (of Differential Geometry)" J. A. Thorpe "History of Differential Geometry" SUNY, Stonybrook "Integration of Differential Geometry into the Undergraduate A. T. Vasquez **CUNY** Curriculum" Elwood Bohn * 1972 Miami U. "Convex Functions, Some Generalizations and Applications" Samuel Goldberg "Probability Models in the Social Sciences" Oberlin C. B. E. Rhoades "Mathematics Programs at Two-Year Colleges - something for

Everyone"

Indiana U.

Harold D. Brown "Applications of Graph Theory to Classification of Organic F72 Ohio State U. Molecules" M. Gerstenhaber "The Delaware River: a Case History in the Use and Abuse of U. of Pennsylvania Models" Robert J. Herbold "Mathematics in Managerial Science" Proctor & Gamble Co. Murray S. Klamkin "Mathematics in Industry" Ford Motor Co. Kenneth Cummins 1973 "A Transformational Approach to Geometry" Kent State U. Harley Flanders "Some Mathematical Aspects of Electrical Circuit Theory" Editor, A.M.M. Will Hahn * "The Retread Problem" Wittenberg U. Andrew Sterrett, Jr. "Recent Activities of CUPM" Denison U. Ralph P. Boas F73 "Consequences of Continuity" Pres., MAA E. L. Glazer "Some Possible Effects of the Computing Art on the Teaching of Case Western Reserve U. Mathematics" W. T. Morris "Probability and Real Decision Making" Ohio State U. M. D. Plummer 1974 "Non-trivial Applications of Graph Theory" Vanderbilt U. Henry O. Pollak "A Loop Switching Problem" Bell Telephone Labs S. E. Pavne "On Finite Moore Graphs" Miami U. K. D. Ray-Chaudhuri "Graphs and Geometries" Ohio State U. G. Noether F74 "How to Make Statistics Interesting" U. of Cincinnati J. Rosenblatt "Introducing Operations Research in the Undergraduate Case-Western Reserve U. Curriculum" Gerald L. Thompson "Operations Research - The State of the Art" Carnegie Mellon U. William J. Cody 1975 "Computer Evaluation of Functions" Argonne Nat'l Lab.

Models"

"Numerical Approximation for Data Driven Ocean Circulation

George Fix

U. of Michigan

	A. B. Willcox Exec. Dir., MAA	"Some Bridges to and from Mathematics"
F75	Edwin E. Moise CUNY	"The Problem of Learning to Teach"
1976	Richard G. Laatsch * Miami U.	"Scrambled Infinite Dimensional Convex Eggs"
	E. B. Saff U. of South Florida	"Geometric Convergence of Rational Functions to Analytic Functions in Unbounded Domains"
	Hans J. Zassenhaus Ohio State U.	"A tribute to Arnold E. Ross on his Retirement"
F76	Fred S. Roberts Rutgers U.	"Graphs, Garbage, and a Pollution Solution: Graph Theory Applied to Environmental Problems"
	Maynard Thompson Indiana U.	"Discrete Mathematical Models for Some Problems Arising in Biology and Medicine"
1977	C. W. Curtiss U. of Oregon	"A Survey of Recent Developments in the Representation Theory of finite Groups"
	D. R. Hughes U. of London	"Designs and Some of Their Connections to Other Branches of Mathematics"
F77	Richerd C. DiPrima Rensselaer Poly. Inst.	"Differential Equations in the Undergraduate Curriculum"
	Alan C. Tucker SUNY, Stonybrook	"Graph Models in a Combinational Problem-Solving Course"
1978	P. Minton Va. Commonwealth U.	"Bidding Models-An Example of Applied Mathematics"
	Neil J. A. Sloane Bell Telephone Labs	"At the Intersection of Computer Science, Communications Theory, and Modern Algebra"
F78	William S. Dorn U. of Denver	"Numerical Instabilities and Their Cure"
	Richard S. Varga Kent State U.	"Numerical Analysis - The State of the Art"
1979	Peter J. Hilton Case-Western Reserve U.	"The Development of Algebraic Topology - A Study in Evolution"
	V. Frederick Rickey Bowling Green State U.	"History of Mathematics as a Pedagogical Tool"
F79	D. L. Bernstein Brown U.	"Mathematical Modeling an Existence Theorems"
	Yung Chen Lu Ohio State U.	"Catastrophe Theory"
1980	Donald O. Koehler * Miami U.	"Evolution and Mathematical Models of Evolution"

	J. Sutherland Frame Michigan State U.	"Groups - A Key to Patterns in Science"
F80	George E. Andrews Penn. State U.	"Recent Implications of the Work of L.J. Rogers"
	D. K. Ray-Chaudhuri Ohio State U.	"An Introduction to Coding Theory"
1981	Ralph P. Boas Northwestern U.	"The Harmonic Series and the Elephants"
	Cliff Long* Bowling Green State U.	"Singular Value Decomposition of Matrices with Applications"
F81	H. T. Banks Brown U.	"Parameter Estimation and Optimal Control in Delay and Partial Differential Equations"
	Philip M. Tuchinsky Ford Motor Co.	"How I Do My Job - Systems Development"
1982	Douglas Faires * Youngstown State U.	"Models of Population"
	R. G. Laatsch Miami U.	"Polyominoes-Pleasurable Places for Perception and Perplexing Packing Puzzles"
	Marcia Sward Trinity C.	"New Initiatives in Pre-College Mathematics Education"
F82	Hans Zassenhaus Ohio State U.	"Mathematicians of Pre-World War II Germany"
	J. M. Greenberg Ohio State U.	"What is Applied Mathematics? What is Applied Mathematics Education"
	S. Nemer Off Budget & Mgmt.	"The Process of Revenue Estimating for State Budget Purposes"
	W. C. Rheinboldt U. of Pittsburgh	"On the Discretization Error for Parameterized Non-Linear Equations"
	D. P. Roselle Virginia Tech. Inst.	"A Sampling of Applied Combinatorial Problems"
1983	N. Azarnia Miami UHamilton	"The Contributions of Anna Johnson Pell Wheeler"
	Darrell Horwath * John Caroll U.	"How to Keep Students Awake: Some Tricks of the Trade"
	D. Lutzer Miami U.	"Topology, Proofs and CUPM's Mathematical Sciences Program Recommendations"
	Maynard Thompson Indiana U.	"Mathematical Modeling: When, Why, and for Whom"
F83	A. Lazer U. of Miami	"Intermediate Value Theorems and Differential Equations"

James R. C. and Joan R.

Leitzel "Mathematical Education in Mainland China"

Ohio State U. Kenneth Meyer

U. of Cincinnati "Stability of Trojan Satellites"

C. Robinson

Northwestern U. "In Search of Stability in a Complex World"

1984 Peter Henrici

U. of North Carolina and E.T.H., Zürich "Recent Progress in Numerical Conformal Mapping"

Richard Little *

Baldwin-Wallace C. "Some Things My Mathematics Professors Never Taught Me"

V. Frederick Rickey

Bowling Green State U. "Curves of Calculus"

Richard Varga "Some Conjectures and Open Problems in Function Theory and

Kent State U. Approximation"

F84 D. Burke

Miami U. "Undecidable Mathematics"

Mary Gray

American U. "Mathematics and the Law"

L. Sanders

Miami U.-Hamilton "Characterizing Trees by a Finite Sequence of Integers"

Phil Schmidt

U. of Akron "Teaching Experimental Applied Mathematics: the TEAM Project"

Lynn Steen

St. Olaf C. "Renewing Undergraduate Mathematics"

1985 I. Greber

Case-Western Reserve U. "Engineering Needs and the College Mathematics Core"

Phil Huneke

Ohio State U. "The Embeddability of Graphs"

James R. C. Leitzel *

Ohio State U. "Three P's for Teaching Mathematics"

P. Wang

Kent State U. "Symbolic Computation on Modern Computers"

F85 Turner Whitted

U. of North Carolina "Causes and Cures of Aliasing in Computer Graphics"

D. E. Cameron "Memoirs on Compact Topological Spaces by P. S. Alexandroff

U. of Akron and P. W. Urysohn - the Birth of Soviet Topology"

Alan H. Schoenfeld "The Reality of Student Problem Solving U. of California-Berkeley Behavior - It's Worse Than You Think"

1986 Alan Poorman *

Ashland C. "Quality Control in the U.S."

Peter Hilton "From Elementary Geometry to Not So Elementary Number **SUNY-Binghamton**

Theory: The Final Story." (This is the title of the talk actually

given.)

Arthur T. White "Ringing the Cosets" Western Michigan U.

Persi Diaconis F86 Stanford U. "Combinatorics and Card Tricks"

> Joe Diestel "Rosenthal's Dichotomy" Kent State U.

Leonard Gillman "Approval Voting" U. of Texas

Milton D. Cox* 1987 "The Remarkable Tilings of Roger Penrose" Miami U.

Herbert S. Wilf "Strings, Substrings, and the Nearest Integer Function" U. of Pennsylvania

Warren Page "The Mathematical Competition in Modeling" N.Y.C. Technical C.

Frank R. Giordano "The Teaching and Practicing of Mathematical Modeling for F87 U.S. Military Acad. Undergraduates"

Kenneth Cummins "Using the Students in Teaching Calculus" Kent State U.

Deborah Tepper Haimo U. of Missouri-St. Louis "Solutions of the Heat Equation"

1988 J. William Friel * "Farey Fractions" U. of Dayton

> George F. Andrews "Dyson's Crank of a Partition" Penn State U.

P. Campbell "Mathematical Discoveries of the 1980's in Applied Mathematics" Beloit C.

H. Edwards F88 "Kronecker's Views of the Foundations of Mathematics" N.Y.U.-Courant Inst.

William Dunham "Vito Volterra and the Limits of Pathology" Hanover C.

Joe Gallian "The Mathematics of Identification Numbers" U. of Minnesota-Duluth

Charles Hampton * 1989 "Calculus: Past, Present and Future" College of Wooster

> Gerald Alexanderson "Gaussian Binomial Coefficients" Santa Clara U.

David E. Kullman F89 "What Colleges Should Do About the New NCTM Standards" Miami U.

Ivan Niven "Applied Topics in College Algebra" U. of Oregon Olaf P. Stackelberg * 1990 "Number Theory and Probability: A Rich Interplay" Kent State U. J. W. Dawson, Jr. "The Life and Work of Kurt Gödel" Penn State U.-York B. A. Case "Are We Teaching Majors the Right Mathematics? Florida State U. Are We Teaching it the Right Way?" Peter E Castro F90 "Industrial Mathematics: More Than Applied Mathematics" Eastman Kodak Co. Eugene C Gartland "Numerical Solution of Problems in Liquid Crystals" Kent State U. Philip M Tuchinsky unknown Ford Motor Co. 1991 Janet Roll* "On Circles and Doughnuts U. of Findlay (or Locally Partially Ordered Groups)" Harvey Keynes "Can Mathematicians be Involved in Education and Still Survive U. of Minnesota in the Profession?" Richard Varga "Solving Large Nonsymmetric Nonsingular Matrix Equations by F91 Kent State U. Iterative Methods" John Ewing 1992 "Can We See the Mandelbrot Set?" Indiana U. James R. C. Leitzel "Challenges to Change" Ohio State U. David E. Kullman * "Variations on a Spiral" Miami U. David S. Moore F92 "Teaching Statistics as a Respectable Subject" Purdue U. James Albert "Teaching Statistical Inference Using Bayes" Bowling Green State U. Alan Stickney * 1993 "A Graphing Calculator Tour" Wittenberg U. Gerald Porter "Linear Algebra as a Laboratory Science" U. of Pennsylvania Stan Wagon F93 "The Impact of Modern Software on Teaching and Research" Macalester C. Charles Groetsch "Inverse Problems: What are They and Why Should We Care?" U. of Cincinnati V. Frederick Rickey "Benjamin Franklin Finkel and the Founding of *The Monthly*" Bowling Green State U,

David Smith "Calculus, Computers, Cooperation, and Composition" Duke U. S. Brent Morris 1994 "Magic Tricks, Card Shuffling, and Dynamic Computer Memories" National Security Agency Joe Kennedy "Lights and Strings and Things" Miami U. Alice Silverberg "Fermat's Last Theorem and Elliptic Curves" Ohio State U. Thomas Hern * "The Image of a Circle: When Eigenvalues Do Not Quite Cut It" Bowling Green State U. Keith Devlin F94 "Whither Mathematics, and What It Means for The Math St. Mary's C of Cal. Professor" "What Should Students Learn from Advanced Mathematics and Daniel Solow Case Western Reserve U. How Should We Teach Them?" Richard Lesh "Equity, Content Quality, and Systemic Initiatives" Ed. Testing Service and NSF Ed Dubinsky "Connections Among Learning, Pedagogy and Assessment" Purdue U. Grahame Bennett 1995 "From Coin Tossing to the Jacobi Polynomials, and Beyond" Indiana U. Floyd Barger * "TBA Part I, Part II" (on teaching.) Youngstown State U, Philip Cheifetz "A Brief History of Calculus Reform and The Harvard Calculus Nassau CC **Project** Underwood Dudley I. "Formulas for Primes" F95 DePauw U. II. "Angle Trisectors" Dale Mugler # "The Gibbs Phenomenon" U. of Akron I. "The 1994/1995 IMOs--A Serendipitous Victory??" Walter Mientka II. "Approximations to Arithmetic Sums and Their Applications" U. of Nebraska "The Search for Proof: David Bressoud I. Cauchy, Dirichlet, and Abel in Paris 1996 Macalester C. II. The Counting of Alternative Sign Matrices" Robert Smith "Spreadsheets in Calculus" Miami U. John Michel * Marietta C. "Navigating to the Center of Ohio and to the Moons of Jupiter" Ed Barbeau F96 "A Nonlinear Recursion Spawned by a Frieze Pattern" U. of Toronto

"Unexpected Results from Undergraduate Researchers"

Aparna Higgins #

U. of Dayton

Laszlo Babai "Surprise Methods in Combinatorics and in the Theory of 1997 U. of Chicago Computing" Barbara (Flajnik) Ashton * "The Mathematics of Frank Lloyd Wright's Architecture" Wittenberg U. Gabor Szekeley "Reminiscences of Paul Erdos" Bowling Green State U. Allan Rossman "Workshop Statistics: Learning by Discovery" Dickinson C. Marjorie Senechal I. "The Aperiodic Zoo" F97 Smith C. II. "The Search for an Aperiodic Tile" Jerry Holt, Dean "[Branch] Rickey and Robinson by the Numbers" Shawnee State U. V. Frederick Rickey # "A Mathematician, Historian, and Teacher Shares His Thoughts, Bowling Green State U. Experiences, and Advice about Mathematics" Frank Morgan I. "The Soap Bubble Geometry Contest" 1998 Williams C. II. "Bubbles and Crystals in Surfaces and in a Sphere" Curtis Bennett "An Escher Version of the Banach-Tarski Paradox" Bowling Green State U. Leo J. Schneider * "A Funny Thing Happened on the Way to the Formula" John Carroll U. David Stone F98 "Mathematics is a Lazy Man's Sport" Georgia Southern U. Douglas Faires# "Designing a Modern Applied Mathematics Program" Youngstown State U. Susan Gantner American Assoc. for Higher "A Study of the Effects of Calculus Reform" Ed. Ronald L. Graham "Mathematics and Computers: Recent Success and Insurmountable 1999 AT&T Labs Research Challenges Roger Marty * "Teaching Mathematical Reasoning" Cleveland State U. Thomas Banchoff F99 "Interactive Geometry on the Internet" Brown U. William Dunham "Euler's Sums and Euler's Crumbs Muhlenberg C. Gilbert Strang

"Small World Networks and Partly Random Graphs"

Investment Opportunities for the Next Millennium"

"Questions about Networks: Stories about Networking"

"Real Estate in Hyperbolic Space:

Mass. Inst of Tech.

Aparna Higgins *

Real Estate

U. of Dayton

2000

Mel Slugbate (Colin Adams)

Slugbate and Mossbutter

Colin Adams "Making Calculus Fun: How to Entertain at Parties" Williams C. Robert L. Devaney "The Mandelbrot Set, the Farey Tree, and the Fibonacci Sequence" F00 Boston U. James Tattersall I. "Two Books that Spanned a Millennium" Providence C II." Mathematical Vignettes from Cambridge." Zaven Karian# "Using Maple for Teaching Probability and Statistics" Denison U. Arthur Benjamin I. "Proofs That Really Count!" 2001 Harvey Mudd C. II. "Mathemagics!" Judith Palagallo * "Random Fractal Images" U. of Akron I. "The Palimpset of Archimedes" V, Frederick Rickey U.S. Military Acad. II. "History of Mathematics as a Pedagogical Tool" I. "Fallacies in Elementary Statistics" F01 Ann Watkins II. "The MAA and Scholarship in the Teaching of Mathematics Cal. State, Northridge Jerry Moreno # "Citizens Stats 101 - Toward a Quantitively Literate Citizenry" John Carroll U. Edward B. Burger I. "How to Always Win at Limbo" Williams C. II. "Personal Thoughts on What to Teach and How Not to Teach it. Jeffrey Weeks "Measuring the Universe 2002 "Part I: Curvature "Part II: Topology" Suzanne Lenhart I. "Applications of Optimal Control to Various Population Models" U. of Tenn., II. "What Do Parallel Parking and Lie Brackets Have in Common?" Oak Ridge Nat. Lab. Thomas Gantner* "Mathematics Journals as a Teaching Resource" U. of Dayton Underwood Dudley I. "Why Teach Mathematics?" F02 II. "Calculus Books" DePauw U. Daniel E. Otero I. "Henry Briggs (1561-1630) and the Story of Logarithms" Xavier U. II. "On Teaching Mathematics with Original Sources" Alan Stickney# "Mathematics Viewed as a Experimental Science" Wittenberg U. I. "Introductory Coding Theory" Dan McWhorter 2003 Nat. Security Agency II. "Mathematics at the National Security Agency" I. "The Mathematics of Doodling" Ravi Vakil Stanford U. II. "Why the Golden Mean?" Harold Putt * "Some Applications of Abstract Algebra" Ohio Northern U. Ann Ritchev "Math Connections"

Mount Union C.

Carl Cowen I. "Rearranging the Alternating Harmonic Series" F03 Purdue U. II. "Connections Between Mathematics and Biology" David Minda# "Some Geometric Gems via Möbius Transformations" U. of Cincinnati Leo Schneider "A Prime AIME Problem" John Carroll U. Jon Stadler "Lights (Over and) Out" Capital U. Joe Gallian I. "Touring a Torus" 2004 U. of Minnesota, Duluth II. "Breaking Drivers' License Codes" Judy Holdener "Sagebrush, Turtles, and Snowflakes" Kenyon C. Dale Mugler * "Music and the Time-Frequency Analysis U. of Akron of Wavelets" J. Kevin Colligan "Breaking the Enigma" Nat. Security Agency James A. Sellers I. "Research in Integer Partitions - Alive and Well" F04 Pennsylvania State U. II. "More Than Just Convergence" Thomas P. Dence# "Pattern Busters" Ashland U. Elizabeth Wilmer "Big Graphs, Fast Walks, Loose Bounds" Oberlin C. Edward Spitznagel "Six Easy Pieces-or How I Came to be an Applier of Mathematics, with Half a Dozen Short Short Stories" Washington U. Christopher N. Swanson I. "The Probability an Amazing Card Trick is Dull" 2005 Ashland U. II. "The Discrete Mathematics of a Card Trick" John P. Holcomb "Understanding Lies, Damned Lies, and Statistics: A Look at Why So Many People Find Statistics Frustrating" Cleveland State U. Mark A. Smith * "Arc Length and Surface Area - What's Up with Calculus Textbooks?" Miami U. Daniel Maki "What are Hidden Markov Models and Who Cares? Indiana U. Ronald L. Graham F05 "Packing Discs in the Plane" U. of California, San Diego Thomas Hern# "I Thought I was Lecturing" Bowling Green State U. Carol Schumacher "Zeroing in on the Implicit Function Theorem" Kenyon C. Leo Schneider I. "A Funny Thing Happened on the Way to the Meeting" II. "Undergraduate Research: Planting the Seed and Watching It John Carroll U.

Grow"

Georgia Benkart I. "Going Up and Down" 2006 U. of Wisconsin, Madison II. "Ladies of the Rings" Dwight Olson * "Some Thoughts on Rings and Things" John Carroll U. **Thomas Price** "Developing an Undergraduate Research Program" U. of Akron David Finn "Bicycle Tracks on the Plane and the Sphere" Rose-Hulman Inst. of Tech. David Singer# F06 "Focusing on the Critical Points of Polynomials" Case-Western Reserve U. Curtis Bennett I. "Understanding the Thurston Model of Hyperbolic Space" Loyola Marymount U. II. "Averaging, Discrete Means, Coalition Building, and a Paradox of Social Choice" Bernd Sturmfels "The Joy of Solving Equations" U. of California, Berkeley Francis Edward Su I. "Preference Sets, Graphs, and Voting in Agreeable Societies" 2007 Harvey Mudd C. II. "My Favorite Math Fun Facts" Daniel E. Otero "Euler, Number Theorist" Xavier U. Judith Palagallo "Curious Curves" U. of Akron Thomas P. Dence * "A Tantalizing Trek through Elementary Number Theory" Ashland U. Thomas Price# F07 "Approximating Sums of Infinite Series" U. of Akron Mihai Caragiu "Geometry with Complex Numbers" Ohio Northern U. I. "Resolved, that a Football is a Mathematical Object" Frank Ryan II. "Mathematics and Truth" Richard Little Surviving the White Water Rapids at the Confluence of the Baldwin-Wallace C. Mathematics Curricula for High School and College" William Higgins *# 2008 "Insights from Archimedes" Wittenberg U. Lew Lefton I. "Infinity Bottles of Beer on the Wall" Georgia Tech II. "Distributed Computing and the Internet" Carl Pomerance I. "The Covering Congruences of Paul Erdös" II. "Euler's Function" Dartmouth C. John Tynan "Answering One of Calculus' Most Boring Questions. F08 Marietta C. (Math with Cosmo)"

"Linguistic Issues in College Mathematics Courses"

Susanna Epp

DePaul U.

David Bressoud I. "Proofs and Confirmations: The Story of the Alternating Sign

Macalester C. Matrix Conjecture"

II. "Calculus as a High School Course"

Wiebke Diestelkamp

"On the Difficulty of Faking Data" U. of Dayton

V. Frederick Rickey 2009

"Jared Mansfield: Ohio's First Mathematician" U.S. Military Academy

Vickie Van Dresar *

"Canoe Do Math?" Ashland U.

Keith Devlin I. "Street Mathematics, and What We Can Learn from It"

Stanford U. II. "When Mathematics Changed Us"

"Good News Everyone! Mathematical Morsels from the Simpsons Sarah Greenwald

and Futurama" Appalachian State U.

Tom LaFramboise F09

School of Medicine

Case Western Reserve U. "Mathematics in Biomedical Research"

Ed Packel "Recent Results in Projectile Motion and a Plug for Experimental

Lake Forest C. Mathematics"

Judith Grabiner I. "It's All for the Best: Optimization in the History of Science"

Pitzer C. II. "Lagrange, Symmetry, and Space"

Judy Holdener #

"Mental Imagery in Mathematics" Kenyon C.

Karen Parshall "The Internationalization of Mathematics in a World of Nations: 2010

1800-1960" U. of Virginia

John Oprea

"Geometry and the Real World" Cleveland State U.

Ivars Peterson I. "Moebius Madness"

Dir. Pub. & Comm. II. "Newton's Clock: Chaos in the Solar System"

MAA

Mark Miller * "Generalizing Euclid V: In Search of the Unique Other" Marietta C.

Michael Henle F10

John Stillwell

"Can You Hear the Mathematics?" Oberlin C.

Barbara Ashton "A Sampler of Topics from Mathematics and the Arts"

Bor. of Manhattan CC, CUNY

I. "Hits and Memories: 1940-1970" U. of San Francisco II. "From Perspective Drawing to the Eighth Dimension"

Dave Sobecki "Of Elephants, Fuzzy Dogs, and Teaching Backwards: A Story

Miami U., Hamilton About Making Your Course Engagin' "

Jennifer Quinn "Combinatorialization of Linear Recurrences through 2011

U. of Washington, Tacoma Weighted Tilings"

Gordon Swain "On Lines and Parabolas, Again and Again" Ashland U. Douglas Ensley I. "Invariants under Group Actions to Amaze Your Friends!" Shippensburg U. II. "Permutations in Graph Puzzles" Don Hunt* "Will it Go 'Round in Circles: Will it Ride Smoothly on Bumpy Ground? (YEAH)" Ohio Northern U. Richard Little # F11 "How I escaped the Peter Principle!" Baldwin-Wallace C. George K. Francis "A Geometrical Puppetshow: Some things you really can't see U.of Illinois without computer graphics" Urbana-Champaign Sergei Tabachnikov I. "In praise of serendipity: a tale of a geometric inequality" Penn. State U. II. "Flavors of Bicycle Mathematics" "5-dimensional geometry is not like 2-dimensional geometry Mark Meckes Case Western Reserve U. (and 3 and 4 are somewhere in between)" Aparna Higgins "Simple Surprises" 2012 U. of Dayton Jeffrey Lagarias "Packing Space with Regular Tetrahedra" U. of Michigan Rachel Hall "Submajorization and the Geometry of Unordered Collections, St. Joseph's U. with Applications to Music and Welfare Economics" Jon Stadler * "Using Mathematics to Gain the Upper Hand Capital U. at Family Game Night" Matt Neal "Ruining Sports with Math" F12 Denison U. Tommy Ratliff "Who has the Power in the Electoral College? You might be Wheaton C. Surprised" I. "Mirror image symmetry from different viewpoints" Erica Flapan Pomona C. II. "Topological symmetry groups" David Meel # "Mathematics in the Media: Leveraging Explorations of Higher Bowling Green State U. Level Mathematics" Sir Randolph Bacon III 2013 "Blown Away: What Knot to Do When Sailing" (Colin Adams, Williams U.) Robert Bosch Oberlin C. "Opt Art" Barbara Faires

II. "Mime-matics

Westminster C.

U. of Dayton

Tim Chartier

Davidson C.

F13

Wiebke Diestelkamp *

Revolution"

"Stefan Banach and the Scottish Café"

L "Sports Ranking: March Madness to Twitter"

"The Lady Tasting Tea: R. A. Fisher and the Statistical

Richard Cleary "Some Non-Standard Sports Applications of Mathematics and

Babson C. Statistics"

Brad Hartlaub
Kenyon C. "Statistics: A Time for Celebration and Change"

Harold Putt # "Using Game Theory to Teach Critical Thinking Skills and

Ohio Northern U. Quantitative Literacy"

2014 Michael Dorff "How Math is Changing the World"

Brigham Young U.

Steve Goldner

U.S. Army Tank-Automotive Research, Development, and

Engineering Center

"Vehicle Impact Test Form Based on a Modified Super-Ellipse"

David A. Lamb

First Technology Safety

Systems

"Protected Mobility Optimization for the Army Ground Fleet"

Philip Blau * "Ideal Prime Factors to Ideals: A Glimpse of a Structural View of

Shawnee State U. Algebra"

Charles Groetsch The Citadel

"A Couple of Integrals, a French Friar, and a Wacky Experiment"

F14 Lew Ludwig # "Reconsidering Hilbert's List With a Pedagogical Twist"

Denison U.

Adam Parker "Rediscovering Lost Techniques in Ordinary Differential

Wittenberg U. Equations"

Robert Devaney I. "Chaos Games and Fractal Images"

Boston U. II. "The Fractal Geometry of the Mandelbrot Set"

William Dunham Muhlenburg C. "Two (More) Morsels from Euler"

2015 Bonita Lawrence "The Marshall Differential Analyzer Project: Solutions of Dynamic

Marshall U. Equations Using Mechanical Integration"

Carl Lee
U. of Kentucky
"The Many Facets of Polyhedra"

Annalisa Crannell I. "Math and Art: The Good, The Bad, and the Pretty"

Franklin & Marshall U. II. "In the Shadow of Desargues"

John Prather * "Taking Other People's Ideas to Extremes"