#### CURRICULUM VITAE

# JULIAN FREDERIC FLERON

### **CURRENT POSITION**

### CONTACT INFORMATION

#### **Professor of Mathematics**

Department of Mathematics Westfield State College 418 Wilson Hall Westfield, Massachusetts 01086 413/572-5716 413/572-5617 (fax) jfleron@wsc.ma.edu www.wsc.ma.edu/math/faculty/fleron/jf\_home.asp

#### **EDUCATION**

Ph.D. in Mathematics; State University of New York University at Albany (SUNYA), May 1994. Dissertation entitled "Holder estimates for the solution of the Cauchy-Riemann equations near weakly pseudoconcave boundaries" written under the direction of R.M. Range.

M.A. in Mathematics; University of Minnesota, June 1990.

Thesis entitled "Pointwise Derivates of the Cantor Function" written under the direction of M.E. Jodeit. **B.A. in Mathematics**; Cornell University, May 1988.

Awarded Distinction in All Subjects upon graduation.

N.Y.S. Regents High School Diploma; Bennett High School, Buffalo Public Schools, June, 1984.

### AREAS OF PROFESSIONAL SPECIALIZATION

#### Mathematics

Multidimensional complex analysis (32AXX, 32FXX), Cantor sets (26A30), real functions (26AXX), history (01AXX), popularization (97C20, 97D30), mathematical biology (92BXX), and philosophy.

## **Mathematics education**

Teacher education (97B50), constructivism (97C50, 97D20), guided discovery learning and the Moore method (97U60, 97D40), underrepresented students (97C60), education reform, cooperative learning (97C60), and technology assisted education (97C80, 97C90, 97U50).

## BOOKS AND REFEREED JOURNAL PUBLICATIONS

"Revisiting Flatland: Tools for navigating between the dimensions" (with V. Ecke)
In final preparation for NCTM <i>Mathematics Teacher</i> , 2008.
"Mobius recycled: New models, art, and symbols inspiring a metaphor for mathematics"
Under revision for NCTM Mathematics Teacher, 2008.
The Amazing Algebra Book: 20 Engaging Tricks (with R. Edwards)
Didax Inc., ISBN 978-1-58324-259-9, 2007.
Discovering the Art of Number Theory: A Topical Guide
Full-length text, 2004.
"Miracles and mathematical biology: the case of the white buffalo" (with D. Hoagland)
Chapter in Environmental Mathematics in the Classroom, B.A. Fusaro and P.C. Kenshaft (Eds.), Mathematical
Association of America, 2003, pp. 71-96.
"First-year and senior seminars: Dual seminars = stronger mathematics majors" (with P.K. Hotchkiss)
PRIMUS, vol. XI, no. 4, December 2001, pp. 289-325.
"Book review Basic Calculus: From Archimedes to Newton to Its Role in the Sciences"
American Mathematical Monthly, vol. 107, no. 4, April 2000, pp. 378-384.
"Gabriel's wedding cake"
College Mathematics Journal, vol. 30, no. 1, January 1999, pp. 35-38.
Reprinted in CD-Rom accompanying <u>Calculus</u> , 7 <sup>th</sup> Ed., by R. E. Larson, Houghton-Mifflin, 2002.
Appears on the MAA's "Articles for your calculus students", http://www.maa.org/pubs/calc_articles.html.
"Quotations for every mathematics class"
Mathematics Teacher, vol. 91, no. 7, October 1998, pp. 549-553; first featured article in the new series
"Discuss with Your Colleagues".

Reprinted in *Virginia Mathematics Teacher*, vol. 25, no. 2, Winter 1999, pp. 19-23.

"Sharp Holder estimates for the solution of ∂ on ellipsoids and their complements via order of contact" *Proceedings of the American Mathematical Society*, vol. 124, no. 10, October 1996, pp. 3193-3202.

"Keeping your research alive" (with P. Humke, L. Lefton, T. Lindquester, and M. Murray.)

Concerns of Young Mathematicians, vol. 3, issue 9, March 1995.

Reprinted in <u>Starting Our Careers</u>, C. Bennett and A. Crannell, American Mathematical Society, 1999, pp. 48-55. "A note on the history of the Cantor set and the Cantor function"

Mathematics Magazine, vol. 67, no. 2, April 1994, pp. 136-140.

# ADDITIONAL PUBLICATIONS

"Was he serious?" The College Mathematics Journal, vol. 38, no. 2, March 2007, p. 130. "Teaching the romance of mathematics" Notices of the American Mathematical Society, vol. 54, no. 3, March 2007, p. 342. "Math and literature: Grades K-1; Grades 2-3; Grades 4-6; Grades 6-8" Intersection: The K-5 Mathematics Specialist Program, Summer 2006, pp. 10-11. "Snowflakes offer a lesson in the study of evolution" Sunday Republican, 27 November, 2005, p. C5 "Governor should take a 'headmaster's holiday"" Sunday Republican, 4 May, 2003, p. B3. "Massachusetts Signing Bonus" Notices of the American Mathematical Society, vol. 48, no. 5, May 2001, p. 470. "Articles 'snowed' readers on science of snowflakes" Union-News, 8 February, 2001, p. A6. "Teachers, not Lt. Gov. Swift, deserve media attention" Union-News, 4 October, 2000, p. A8. "Book review: Excursions into Mathematics" Mathematical Association of America OnLine (www.maa.org/reviews/briefly.html), September 2000. "Book review: The Heart of Mathematics" Mathematical Association of America OnLine (www.maa.org/reviews/heartmath.html), June 2000. "Revisions in math testing don't add up for students" Union-News, 16 February, 2000, p. A8. "The Mobius metaphor" Focus, Summer 1997, p. 14. Reprinted in Humanistic Mathematics Network Journal, vol. 19, March 1999, p. 38. "In every mathematician is the soul of a poet" Union-News, 15 February, 1999, p. A8. "NBA lockout pales by comparison to faculty talks" Sunday-Republican, 3 January, 1999, p. B3. "Blame education policy for teacher test failures" Sunday-Republican, 12 July, 1998, p. B3. "Book review: The Mystery of Numbers" Mathematical Association of America OnLine (www.maa.org/reviews/mystery.html), June 1998. "Faculty forum - Good Will Hunting" Campus Voice, 4 May, 1998. "Umass ignored state colleges" Union-News, 9 September, 1997, p. A10. "Mathematics and education quotations" IMSTI Newsletter, vol. 5, April 1996. "Exxon education foundation's K-3 math specialist program" IMSTI Newsletter, vol. 4, February 1996.

### FEATURE ARTICLES

"Professor takes protest public" Union-News, 15 February, 2005, B1.
"Wise owls help pupils with math" Union-News, 29 November, 2000, p. B1.
"Today's forecast calls for learning" Union-News, 10 November, 1999, p. B1.
"Math for everyday use, and a little fun too" Westfield Evening News, 29 April, 1998, p. 12.
"Julian Fleron: making mathematics lovable" Focus, Summer 1997, pp. 12-13, 15.
"Mathematics more than mere arithmetic" Union-News, 17 February, 1997, pp. B1-2.

## PAPERS AND MANUSCRIPTS

"Flexagons, magic, genius, and the Nobel Prize" Guided discovery chapter on flexagons, 10/05. The Infinite and The Infinite (Guide's Manual) Under revision. Book field tested during the spring of 1998 in the course Mathematical Explorations. "Weekly writing assignments in courses for mathematics majors" (with P.K. Hotchkiss) Presented at the MAA National Summer Meeting, 8/99. "The geometry, calculus and/or topology of model railroad train tracks" (with J. Pawlishen and R. Tefts) Presented at the Hudson River Undergraduate Mathematics Conference, 4/99. Research continuing. "Trail markers along the tenure climb" Presented at the MAA National Summer Meeting, 8/99. "A teacher's prayer" "The fuzzy world of fuzzy set theory and fuzzy logic" Survey article presented to the Hudson River Undergraduate Mathematics Conference, 4/99. "Proof without words: Achilles catches Zeno's tortoise" "Notes on cryptography," "Real Analysis: My Story," "Bees as Mathematicians," "Ciphers and cryptography," "Fibonacci numbers via matrix algebra," and "Kaleidoscopes" Survey articles with extensive references for use in classes, workshops, etc. "The opaque square and related problems" Presented at the Hudson River Undergraduate Mathematics Conference, 4/95. "A core mathematics class that appears to serve its purpose" Distributed at the IMSTI Cooperative Learning Conference, 4/95. "Holder estimates for the solution of the Cauchy-Riemann equations near weakly pseudoconcave boundaries" Ph.D. dissertation, defended 4/94. "Optimal Holder estimates for the solution of  $\partial$  on complemented complex ellipsoids" Presented at the SUNYA Complex Analysis Seminar, 10/93. "Holder estimates for the solution of  $\partial$  on complemented complex ellipsoids" Ph.D. oral exam presentation, 5/93. "A change in perspective" Presented at the MER Special Session of the AMS-MAA Joint Mathematics Meetings, 1/93. "Holder estimates for the solution of  $\partial$  on real ellipsoids via the linear support function" Presented at the SUNYA Analysis Seminar, 12/92. "Extension properties of holomorphic functions in higher dimensions" Presented at the N.Y.S. Regional Graduate Mathematics Conference, 3/92. "Pointwise derivates of the Cantor function" Masters thesis, defended 5/90. "Ideas in Greek mathematics" Results of research assistantship, presented 8/88.

# GRANTS, AWARDS AND FELLOWSHIPS

Westfield State College's "Outstanding Professor Award", 5/2007. Awarded a \$1000 grant from the Westfield State College Foundation (with V. Ecke and D. Samwell) to support "Visualizing Mathematics", 11/06.

Westfield State College's "Outstanding Professor Award", 5/2006.

- Awarded a \$500 grant from the Westfield State College Foundation (with C. Grobe and R. Rees) to support the "Faculty Lecture Series", 12/2003.
- Awarded "Certificate of Appreciation for Inspiring Others to Enter Teaching" by Westfield State College, 12/2002.
- Awarded a \$900 grant from the Westfield State College Foundation (with P.K. Hotchkiss) to support student travel to the 2002 Hudson River Undergraduate Mathematics Conference.
- Awarded a \$3,660 grant from Shurtleff Children's Services to support the Wise Owls Mathematics Mentoring Program, an AmericaCounts Program, 2000.
- Awarded a \$2,500 Massachusetts Board of Higher Education Writing Across the Curriculum grant, 2000.
- Awarded a \$2,500 Westfield State College Teaching Grant (with G. Brewster, F. Giuliano, D. Hoagland, and B.
- Rothermel) to develop Web-based resources for writing in mathematics and the sciences, 1998. Awarded a \$1,600 Westfield State College Teaching Grant (with B. Rothermel and S. Sheridan) to develop and implement
- a freshperson learning community combining drawing, writing and mathematics, 1998.
- Awarded a \$500 Westfield State College Foundation Grant (with G. Neikirk) to partially support publication of *The Best of Westfield State*, 1997.
- Awarded a \$2,000 Westfield State College Teaching Grant to partially support development of book chapters for the course Mathematical Explorations, 1997.
- Awarded a \$2,000 Westfield State College Teaching Grant (with G. Neikirk and M. Henley) to partially support publication of *The Best of Westfield State*, 1996.

New Experiences in Teaching (Project NExT) Fellow, 1994-95.

United States Department of Education Fellow, 1991-94.

Who's Who Among Students in American Universities and Colleges, 1994.

Citation for Excellence in Teaching awarded by the University of Minnesota, 1990.

Graduated with Distinction in All Subjects from Cornell University, 1988.

Cornell University Dean's List, 1985-88.

# PROFESSIONAL ACTIVITIES

Project NExT electronic listserv participant, 1994-present.

Mathematical Association of America's MAA Online book reviewer, 1998-present.

College Mathematics Journal referee, 1999-present.

Mathematics Magazine referee 1995; 2000 - present.

Hudson River Undergraduate Mathematics Conference local organizer, 1995-2005.

Classroom Resources Materials (MAA) Editorial Board Member, 2000 - 2002.

Lead editor of Essentials of Mathematics by M. Hale which was published in 2003.

W.H. Freeman textbook reviewer, 2002-2004.

McGraw-Hill textbook reviewer, 2001-2003.

Keene State College Department of Mathematics external reviewer, 2001.

Math\_News electronic distribution list organizer, 1997-1998.

Guest Speaker on Rep. Cele Hahn's WNNZ radio show; Topic "Miracles and Mathematical Biology: The Case of the White Buffalo," 12/97.

Mathematics Editor for the book <u>Drawing/Writing and the New Literacy</u> by Susan Rich Sheridan, 1996-97. Exxon Education Foundation "Teachers Networking Teachers" electronic listserv participant, 1995-1997. Prentice Hall textbook reviewer, 1996-1997.

## CREATIVE ACTIVITIES

Mathematical and Educational Quotation Server creator and editor, 1995-present. Available at the URL www.wsc.ma.edu/math/faculty/fleron/quotes/. The Best of Westfield State Executive Editor (with G. Neikirk), 1996-98.

#### TEACHING AND PROFESSIONAL EXPERIENCE

Professor
Department of Mathematics, Westfield State College, 2004 – present.
Faculty Liaison
Westfield Professional Development School Network, 2007 – present.
Associate Professor
Department of Mathematics, Westfield State College, 2000-2004.
Assistant Professor
Department of Mathematics, Westfield State College, 1994-2000.
Coordinator
Wise Owls Mathematics Mentoring Program, 2000-01.
Teacher
Munger Hill after-school enrichment program, 2000.
Teacher
In-service Teacher Education Program, Westfield Public Schools, 1998.
Education Specialist
Albany, N.Y. Public Schools and Department of Mathematics and Statistics, SUNYA, 1991-1994.
Teaching Fellow, Lecturer, and Teaching Assistant
Department of Mathematics and Statistics, SUNYA, 1990-1994.
Teacher
Shenedehowa Advocates for Gifted Education Saturday Scholar Program, 1994.
Teaching Assistant
School of Mathematics, University of Minnesota, 1988-1990.
Research Assistant and Computer Software Specialist
Department of Education, Cornell University, 1987-88.

## COURSES TAUGHT\*

MA0103 - College Algebra
MA0104 - Precalculus
MA0105 - Calculus I
MA0106 - Calculus II
MA0110 - Mathematical Explorations
MA0111 - Mathematical Applications
MA0115 - Mathematics for Business
and Social Sciences
MA0150 - Foundations: Sets and Logic
MA0201 - Calculus III
MA0216 - Studies in the Literature of Mathematics
MA0251 - Foundations: Geometry
MA0253 - Foundations: Number Systems
MA0301 - Modern Abstract Algebra I

MA0306 - Modern Geometry I MA0308 - Introductory Analysis MA0311 - Number Theory MA0323 - Complex Analysis MA0334 - Operations Research and Modeling MA0360 - Current Trends in Mathematics and Mathematics Education MA0390 - Senior Seminar in Mathematics MA0536 - Mathematics Technology Workshop MA0610 - Innovations in Mathematics and Mathematics Education MA0690 - Graduate Seminar in Mathematics

MA0302 - Modern Abstract Algebra II

#### STUDENT RESEARCH SUPERVISED

- "Sudoku and CAT Scans," Christina Climo and Kristi Richardson, presented at the Hudson River Undergraduate Mathematics Conference, 04/07.
- "Proof II: A sequel to the award-winning play," Jennifer King and the Westfield State Mobius band, performed at the Hudson River Undergraduate Mathematics Conference, 04/06.
- "Quotations + famous mottos = mathematical motivation," Colleen Dalton, Lindsay Jardin, and Marlee Berg, presented at the Hudson River Undergraduate Mathematics Conference, 4/06.

<sup>\*</sup> All courses are given with Westfield State College (WSC) designations; all service and activities are at WSC.

- "Poverty, romance and the three Greek problems," Nicole Mercier, presented at the Hudson River Undergraduate Mathematics Conference, 4/06.
- "Finding rationals in the Cantor set," Billy Jackson, presented at the Hudson River Undergraduate Mathematics Conference, 4/05.
- "What's so important about Venus crossing the Sun?" Jennifer A. Rust, presented at the Hudson River Undergraduate Mathematics Conference, 4/05.
- "Pegging central solitaire using group theory," Jenny Kirouac, presented at the Hudson River Undergraduate Mathematics Conference, 4/05.
- "Pirates of the hexaflexagon," Kate Wesolowski, presented at the Hudson River Undergraduate Mathematics Conference, 4/05.
- "Do derivatives define dimension? Definitely," Jenny Kirouac, presented at the Hudson River Undergraduate Mathematics Conference, 4/04.
- "Prova dos nove: Proof of nine and divisibility rules," Aderito Pires, presented at the Hudson River Undergraduate Mathematics Conference, 4/04.

"If we're so smart, why don't we always win?" Stuart Ferguson, presented at the Hudson River Undergraduate Mathematics

Conference, 4/03.

- "Naming really large numbers," Jenny Kirouc, presented at the Northeast Sectional Meeting of the Mathematical Association of America, 11/03 and the Hudson River Undergraduate Mathematics Conference, 4/02.
- "Variants and generalizations of Fermat's last theorem" and "Partitions: Euler, Ramanujan, an important new discovery, and student research," G. Kennedy, S. Lewison, and Julian F. Fleron, presented at the Hudson River Undergraduate Mathematics Conference, 4/02.
- "M<sup>4</sup> Mathematics, music, Miles (Davis), and (Dave) Matthews," Brandt Kronholm and Julian F. Fleron, presented at the Hudson River Undergraduate Mathematics Conference, 4/01.
- "Have you seen the golden ratio lately?" Jonathan Eckard, presented at the Hudson River Undergraduate Mathematics Conference, 4/01.
- "Career information page," Jennifer Sparkes, available at the URL www.wsc.ma.edu/math/careers/math.html .
- "Busy beavers in Massachusetts," (with D. Hoagland) Inshirah Abdur-Rauf, Chantal Ayotte, Suzanne Gallagher, and Kathryn Matras, presented at the Hudson River Undergraduate Mathematics Conference, 4/00.
- "Controlling the population of black bears in Wisconsin," (with D. Hoagland) Christopher S. Adams, Suzanne Gallagher, and Jessica Ferris, presented at the Northeast Sectional Meeting of the Mathematical Association of America, 11/99 and the Hudson River Undergraduate Mathematics Conference, 4/00.
- "Bambi versus hunters: Controlling the deer population in Massachusetts," (with D. Hoagland) Inshirah Abdur-Rauf, Chantal Ayotte, Jessica Czuprynski, and Kathryn Matras, presented at the Northeast Sectional Meeting of the Mathematical Association of America, 11/99.

"The geometry, calculus, and/or topology of model railroad train tracks," Jenny Pawlishen, Rosann Tefts, and Julian Fleron, presented at the Hudson River Undergraduate Mathematics Conference, 4/99.

- "Introduction to surreal numbers," Monique Despres, presented at the Hudson River Undergraduate Mathematics Conference, 4/98.
- "Fences, boxes and symmetry," Adam Cardinal-Stakenas, presented at the Hudson River Undergraduate Mathematics Conference, 4/98.
- "Generalizing Fermat's last theorem," Randall Vaill, presented at the Hudson River Undergraduate Mathematics Conference, 4/98.
- "The WAR on flash cards," Julie Arrison, The Best of Westfield State, vol. 2, Spring 1998, pp. 6-7.
- "Kaleidoscopes: Scientific beauty," Michelle Boussy, presented at the Hudson River Undergraduate Mathematics Conference, 4/96 and in *The Best of Westfield State*, vol. 1, Spring 1997, pp. 7-9.
- "Constructible numbers and the problem of 'doubling the cube'," John Baumann, presented at the Hudson River Undergraduate Mathematics Conference, 4/96.

### COLLEGE AND DEPARTMENT SERVICE<sup>\*</sup>

Campus Promotion Committee

- AY2005-06, 06-07; Chair

- AY2004-05, 07-08

Department of Mathematics Peer Evaluation Committee

- AY2006-07; Chair for one evaluation

- AY2005-06; Chair for one evaluation

- AY2004-05; Chair for one evaluation

- AY2003-04
- AY2002-03; Chair for four evaluations
- AY2000-01; Chair for one evaluation
- AY1999-00.

Department of Mathematics Search Committee

- AY2004-05; Chair - tenure-track hire made.

- AY2001-02; tenure-track hire made.
- AY1999-00; tenure-track hire made.
- AY1997-98; Chair tenure-track hire made.

Department of Mathematics Core Course Advising Catalog, Chair, 2002.

All College Committee, AY1997-98.

Department of Mathematics Carey Scholarship Committee, 1997-98.

Campus Curriculum Committee

- 1995-97.

- Secretary AY1996-97.

Emeriti/Emeritae Committee, AY1995-96.

Future Search Conference, August 1995.

Department of Mathematics Graduate Committee, AY1994-95.

## COLLEGE ACTIVITIES\*

Co-Coordinator of biannual Math Jamborees at the Westfield Boys and Girls Club, 1998 – present. Urban Education summer program teacher, 1995-present. Student assistant supervisor, 1995-present. WSC Faculty Summer Reading Group, 2002- 2005. Discussion Group on the Profession of Teaching organizer, 1996-2001. Teaching-Forum electronic distribution list organizer, 1996-2000. Math Club Advisor, 1995-1998. IMSTI summer program teacher, 1995-1996. 1996 WSC Commencement Speaker host. Student teaching supervisor, 1995-1996.

## PROFESSIONAL CONFERENCES

Hudson River Undergraduate Mathematics Conference, Canton, NY, 04/08. Legacy of R.L. Moore Conference, Austin, TX, 4/07. The Mathematical Preparation of Elementary School Teachers, Worcester, MA, 03/07. Hudson River Undergraduate Mathematics Conference, Westfield, MA, 4/06. Speaker: "Möbius recycled: Garland, hearts, stars, and a metaphor for mathematics" Viewpoints: Mathematics and Art 2005, Lancaster, PA, 6/05. Hudson River Undergraduate Mathematics Conference, South Hadley, MA, 4/04. Northeast Sectional Meeting of the Mathematical Association of America, North Adams, MA, 6/03. Invited Address: "Model railroad train tracks, Tangles, dominoes, and Tetris: The evolution of deep mathematical problems from children's toys." Hudson River Undergraduate Mathematics Conference, Schenectady, NY, 4/03. Speaker: "Miracles and mathematical biology: The case of the white buffalo." American Mathematical Society and Mathematical Association of America Joint Meetings; Baltimore, MD, 1/03; Hudson River Undergraduate Mathematics Conference, Clinton, NY, 4/02. Speaker: "Variants and generalizations of Fermat's last theorem" (with G. Kennedy and S. Lewison). Speaker: "Partitions: Euler, Ramanujan, an important new discovery, and student research" (with G. Kennedy and S. Lewison). American Mathematical Society and Mathematical Association of America Joint Meetings; San Diego, CA, 1/02; Contributed paper: "A low-tech revolution in active, cooperative proving" (with P.K. Hotchkiss). Contributed paper: "Building a mathematical community to strengthen an undergraduate mathematics program" (with P.K. Hotchkiss). Hudson River Undergraduate Mathematics Conference, Skidmore, NY, 4/01.

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Speaker: "M<sup>4</sup> - Mathematics, Music, Miles (Davis), and (Dave) Matthews" (with B. Kronholm). American Mathematical Society and Mathematical Association of America Joint Meetings; New Orleans, LA, 1/01; Contributed paper: "First-year seminar: Engaging and preparing mathematics students." Panelist: "Writing and the mathematics classroom." Hudson River Undergraduate Mathematics Conference, Poughkeepsie, NY, 4/00. Mathematical Association of America Summer Meeting, Providence, RI, 8/99. Contributed paper "Weekly writing assignments in classes for mathematics majors" (with P.K. Hotchkiss). Contributed paper "Cantor's theorem: Mathematics' most accessible masterwork." Panelist: "Getting published in the MAA journals: From initial idea to publication." Panelist: "What to do now to get tenure later." Hudson River Undergraduate Mathematics Conference, Loudonville, NY, 4/99. Speaker: "The fuzzy world of fuzzy logic and fuzzy set theory." Hudson River Undergraduate Mathematics Conference; Schenectady, NY, 4/98. Speaker: "Gabriel's wedding cake." Northeast Sectional Meeting of the Mathematical Association of America; Springfield, MA, 11/97. Speaker: "Miracles and mathematical biology: the case of the white buffalo." Massachusetts Public Higher Education Conference of Mathematics and Quantitative Thinking; Boston, MA, 6/97. Speaker: "Mathematical explorations: a powerful and engaging liberal arts experience." PALMS Conference: How can schools of science, mathematics, and education work together to prepare teachers for the next century; Marlborough, MA; 5/97. Hudson River Undergraduate Mathematics Conference; Williamstown, MA, 4/97. Long Island Mathematics Conference (LIMACON); Old Westbury, NY, 3/97. Invited speaker: "Enrichment eclecticos: quotes, ciphers, biographies, topology, ..." MER Workshop: Teacher education and mathematics departments; Chicago, IL, 11/96. Northeast Meeting of the Mathematical Association of America; Amherst, MA, 8/96. Hudson River Undergraduate Mathematics Conference; Saratoga Springs, NY, 4/96. National Council of Teachers of Mathematics/Exxon Education Foundation Conference; Orlando, FL, 9/95. Special guest and panel facilitator. American Mathematical Society and Mathematical Association of America Summer Meetings; Burlington, VT, 8/95. Contributed paper "A mathematics course that gets right to the core of it." PALMS Conference: New teaching methods in science and mathematics for the 21st century; Westfield, MA, 5/95. Westfield State College Cooperative Learning Conference; Westfield, MA, 4/95. Hudson River Undergraduate Mathematics Conference; Loudonville, NY, 4/95; Speaker: "The opaque square and related problems." Annual Meeting of the National Council of Teachers of Mathematics; Boston, MA, 4/95. American Mathematical Society and Mathematical Association of America Joint Meetings; San Francisco, CA, 1/95. Panel facilitator: "Keeping your research alive." American Mathematical Society and Mathematical Association of America Summer Meetings; Minneapolis, MN, 8/94. Project NExT (New Experiences in Teaching) Workshop; Minneapolis, MN, 8/94. NSF-CBMS Regional Conference: Complex Dynamics in Higher Dimensions; Albany, NY, 7/94. AMTE-MER Workshop: Preparation for teaching mathematics: issues, policy and programs; Rennselaer, NY, 11/93. Treisman Mathematics Workshop; Albany, NY, 4/93. American Mathematical Society and Mathematical Association of America Joint Meetings; San Antonio, TX, 1/93. Invited paper "A Change in perspective." N.Y.S. Regional Graduate Mathematics Conference; Syracuse, NY, 3/92. Speaker: "Extension properties of holomorphic functions in higher dimensions." Conference on Complex Analysis in Honor of R.C. Gunning and J.J. Kohn; Princeton, NJ, 3/92. Rensselear-Columbia-Greene Counties Conference on Professional Development; Columbia, NY, 3/92. Speaker: "Polishing the stone." American Mathematical Society and Mathematical Association of America Joint Meetings; Baltimore, MD, 1/92. SUNY Mathematics Workshop; Syracuse, NY, 10/91.

### SEMINARS, SYMPOSIA AND MINICOURSES

Speaker: Basic Notions Seminar -- "Sudoku solving = CAT scan imaging", 1/07. Speaker: Science Seminar Series -- "Mathematics lights up the entertainment world", 2/26/04

Speaker: WSC Faculty Center.

-- "Poster idea swap" (with F. Giuliano and V. Diana) for the "Brown Bag Lunch Series", 10/17/02.

-- "Guided-discovery, cooperative learning, and other radical tools to inspire masses of disinterested core students" for the "Work-in-Progress Series", 4/24/02.

Speaker: Hopefully Well Affected, Westfield, MA, 3/02.

-- "Number Theory"

Speaker: Union College Undergraduate Mathematics Seminar, 10/24/00.

Westfield State College Mathematics Colloquium, 2/23/01.

-- "Model railroad train tracks, Tangles, dominoes, and Tetris: The evolution of deep mathematical problems from children's toys."

Organizer: WSC Discussion Group on the Profession of Teaching, 1996-2000.

Speaker: Westfield Rotary Club, 8/24/98.

-- "What is mathematics? What is a mathematician?"

Organizer and speaker: WSC Math Club, 1995-1998.

- -- "On the Path to Math: Math Activities for Children"
- -- "The Proof: Nova Special on Wiles' Proof of Fermat's Last Theorem"
- -- "Introduction to Fractals."
- -- "Career Opportunities in Mathematics and Related Areas."

Speaker: WSC Student National Education Association, 4/97.

-- "Secret codes, kaleidoscopes, flexigons,...; mathematical wonders for all ages."

Speaker: WSC Honors Program Brown Bag Symposia, 11/96.

-- "The American Bison."

Discussant: WSC Division of Graduate and Continuing Education sponsored workshop "Why Art?," 11/95.

Speaker and participant: SUNYA Analysis Seminar, 1992-94.

Speaker and participant: SUNYA Complex Analysis Seminar, 1992-94.

Participant: A Symposium of Germany's Education and Training System; Albany, NY, 6/93.

Invited speaker: CASDA Seminar on the Teaching of Mathematics; Albany, NY, 2/92, 3/93.

Participant: Harvard Calculus Consortium Minicourse; San Antonio, TX, 1/93.

Organizer, speaker and participant: SUNYA Seminar on Mathematics Education, 1991-92.

Speaker and participant: SUNYA Graduate Mathematics Seminar, 1990-91.