

# CURRICULUM VITAE

(short version available upon request)

## Colm Mulcahy

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Email : colm@spelman.edu  
URL : <http://www.spelman.edu/~colm>
- Born** September 1958, Dublin, Ireland
- Citizenship** Irish (Permanent resident status in U.S.A.)
- Education** Ph.D. in Mathematics, Cornell University, 1985  
M.A. in Mathematics, Cornell University, 1982  
M.Sc. in Mathematics, University College Dublin, 1979  
B.Sc. in Mathematical Sciences, University College Dublin, 1978
- Employment** Spelman College, Associate Professor, 1996 –  
(Chair, Dept. of Mathematics, 2003 – 2006)  
Spelman College, Assistant Professor, 1988 – 1996  
Emory University, Assistant Professor, 1987 – 1988  
University of Hawaii at Manoa, Assistant Professor, 1985 – 1987  
Cornell University, Teaching Assistant, 1979 – 1985  
University College Dublin, Teaching Assistant, 1978 – 1979
- Summer Employment** Lawrence Livermore National Laboratory, Livermore, CA, August 1997  
The Boeing Company, Seattle, WA, August 1996 (mini – sabattical)  
Lawrence Livermore National Laboratory, Livermore, CA, July 1996

### Professional memberships

1. MAA (Mathematical Association of America), plus these special interest groups: SIGMAA QL, BIO SIGMAA (charter member), and SIGMAA-ARTS (charter member)
2. SIAM (Society for Industrial and Applied Mathematics), also SIAG/GD (Siam Activiy Group on Geometric Design)
3. AWM (Association for Women in Mathematics)
4. ACM (Association for Computing Machinery), also SIGGRAPH (Graphics) group
5. IEEE (Institute for Electrical & Electronic Engineering), also Graphics group
6. AAAS (American Association for the Advancement of Science)
7. IMS (Irish Mathematical Society)
8. IBM (International Brotherhood of Magicians), also Ring 9 (Georgia Chapter)
9. SMB (Society for Mathematical Biology)

## Awards

1. 2001 *Fannie Lou Hamer Award* (Spelman College Board of Trustees) for community service, awarded April 2001.
2. 1997 *Carl B. Allendoerfer Award* (Mathematical Association of America prize for excellence in exposition), for “Plotting and Scheming with Wavelets,” *Mathematics Magazine* (December 1996), awarded August 1997 at MAA Mathfest '97.

## Books

1. (in preparation) *Fifty-Two Mathematical Card Tricks*
2. (with Jeffrey O. Bennett) *Instructor's Study Guide and Solutions Manual*, 152+ pages, to accompany *Essentials of Using and Understanding Mathematics—A Quantitative Reasoning Approach*, 2nd Edition, by Jeffrey O. Bennett and William L. Briggs, Addison-Wesley (August 2002)
3. (with William L. Briggs) *Student's Study Guide and Solutions Manual*, 81+ pages, to accompany *Essentials of Using and Understanding Mathematics—A Quantitative Reasoning Approach*, 2nd Edition, by Jeffrey O. Bennett and William L. Briggs, Addison-Wesley (August 2002)
4. (with Jeffrey O. Bennett) *Instructor's Study Guide and Solutions Manual*, 230+ pages, to accompany *Using and Understanding Mathematics—A Quantitative Reasoning Approach*, 2nd Edition, by Jeffrey O. Bennett and William L. Briggs, Addison-Wesley (August 2001)
5. (with William L. Briggs) *Student's Study Guide and Solutions Manual*, 125+ pages, to accompany *Using and Understanding Mathematics—A Quantitative Reasoning Approach*, 2nd Edition, by Jeffrey O. Bennett and William L. Briggs, Addison-Wesley (August 2001)

## Book Chapters

1. (to appear) “Toe Tack Trick,” a chapter in *G4G9 Gathering for Gardner Exchange Book*, edited by Scott Hudson, 2011
2. (to appear) “Mathemagical Miracles,” in *The Second Book of BAMA Talks*, edited by Tatiana Shubin *et al*, Mathematical Association of America, 2011
3. (to appear) “His Genetic Evolution—One to Eight Inclusive (The g4g8 Bracelet),” a chapter in *G4G8 Gathering for Gardner Exchange Book*, edited by Scott Hudson, 2010
4. “Mathematical Idol,” in *Mathematical Wizardry for a Gardner*, edited by Ed. Pegg Jr, Alan H. Schoen & Tom Rodgers, A.K. Peters, April 2009
5. (as Earnest Hammingway) “Horses In the Stream and Other Short Stories,” 233–247, *Homage to a Pied Puzzler*, edited by Ed. Pegg Jr, Alan H. Schoen & Tom Rodgers, A.K. Peters, February 2009
6. “Low-Down Triple Dealing,” *A Lifetime of Puzzles*, edited by Eric Demaine, Martin Demaine & Tom Rodgers, 29–34, A.K. Peters, November 2008
7. (as Earnest Hammingway) “Horses In the Stream and Other Short Stories,” a chapter in *G4G7 Gathering for Gardner Exchange Book—Volume 1*, 208–217, edited by Scott Hudson, June 2007
8. “Fitch Cheney’s Five Card Trick and Generalizations,” in *The Edge of the Universe—Celebrating Ten Years of Math Horizons*, edited by Deanna Haunnsperger & Stephen Kennedy, Mathematical Association of America, August 2006
9. (as Brain Epstein) “All You Need Is Cards,” in *Puzzlers’ Tribute: A Feast for the Mind*, 179–190, edited by David Wolfe & Tom Rodgers, A.K. Peters (January 2002)

## Refereed Print Publications

1. “One of Six and Another of Half a Dozen,” *Word Ways* (The Journal of Recreational Linguistics), May 2007
2. “An ESPeriment with Cards,” *Math Horizons*, 10–12, Mathematical Association of America (February 2007)
3. “Top 5 Reasons to Like Mathematical Card Tricks,” *Math Horizons*, 5–7, Mathematical Association of America (February 2004)
4. “Fitch Cheney’s Five Card Trick and Generalizations,” *Math Horizons*, 10–13, Mathematical Association of America (February 2003)
5. (with John H. Conway & Tom Sederberg) “Tan Line Lofts Curve–Ouch!” *Math Horizons*, 1644–1645, Mathematical Association of America (April 2002)
6. (with John Rossi) “A fresh approach to the Singular Value Decomposition,” MAA’s *College Mathematics Journal*, **29**, 3, 199–207 (May 1998)
7. “Image Compression Using The Haar Wavelet Transform,” *Spelman Science & Mathematics Journal*, **1**, 1, 22–31 (Spring 1997)
8. “Plotting and Scheming with Wavelets,” MAA’s *Mathematics Magazine*, **69**, 5, 323–343 (December 1996)  
(winner of Mathematical Association of America *Carl B. Allendoerfer Award* for excellence in exposition)
9. “The Curves and Surfaces of Computer Aided Geometric Design,” *Maple Tech*, **3**, 1, Birkhäuser/Springer, 65–73 (April 1996)
10. (with Eberhard Becker & Alex Rosenberg) “Fans, quasi-fans, and their reduced Witt rings of higher level,” *Algebra Berichte*, **68**, 1–36 (1992)
11. (with Eberhard Becker & Alex Rosenberg) “Ring theory of higher level reduced Witt rings,” *Algebra Berichte*, **68**, 37–66 (1992)
12. (with Murray Marshall) “The Witt ring of a Space of Signatures,” *Journal of Pure and Applied Algebra*, **67**, 179–188 (1990)
13. (with Murray Marshall) “The representation theorem for Spaces of Signatures,” in Proceedings of a Conference on Quadratic Forms and Real Algebraic Geometry, *Rocky Mountain Journal of Mathematics*, **19**, 807–810 (1989)
14. “A representation theorem for higher level reduced Witt rings,” *Journal of Algebra* **119**, 105–122 (1988)
15. “An abstract approach to higher level forms and rigidity,” *Communications in Algebra*, **16**(3), 577–612 (1988)

## Other Print Publications

1. Opening problem in THE PLAYGROUND problem section in *Math Horizons*, 30, Mathematical Association of America (April 2009)
2. An Interview with Robert Schneider, MAA Focus, 6–8, November 2007  
(<http://www.maa.org/pubs/nov07web.pdf>)
3. Review of book *Life By The Numbers* by Keith Devlin, *American Mathematical Monthly*, Vol 107, No 7, 661–663 (Aug–Sep 2000)

## Online Publications

1. "The Three Piles (This Isn't That Trick)," MAA's *Card Colm*, October 2010  
(<http://www.maa.org/columns/colm/cardcolm201011.html>)
2. "Celebration of Mind," MAA's *Card Colm*, October 2010  
(<http://www.maa.org/columns/colm/cardcolm201010.html>)
3. "Also In His Own Words: More Mathemagical Games (and Tricks) With Cards From Martin Gardner," MAA's *Card Colm*, August 2010  
(<http://www.maa.org/columns/colm/cardcolm201008.html>)
4. "In His Own Words: Mathematical Card Tricks From Martin Gardner (1914-2010)," MAA's *Card Colm*, June 2010  
(<http://www.maa.org/columns/colm/cardcolm201006.html>)
5. "Mathematical Idol 2010," MAA's *Card Colm*, April 2010  
(<http://www.maa.org/columns/colm/cardcolm201004.html>)
6. "Tighter Ascertainments: Matching Interest Rates," MAA's *Card Colm*, February 2010  
(<http://www.maa.org/columns/colm/cardcolm201002.html>)
7. "The Boldgach Conjecture," MAA's *Card Colm*, December 2009  
(<http://www.maa.org/columns/colm/cardcolm200912.html>)
8. "Poker-Faced Over the Phone," MAA's *Card Colm*, October 2009  
(<http://www.maa.org/columns/colm/cardcolm200910.html>)
9. "The Bligreath Principle," MAA's *Card Colm*, August 2009  
(<http://www.maa.org/columns/colm/cardcolm200908.html>)
10. "Two Summer Difference Certainties," MAA's *Card Colm*, June 2009  
(<http://www.maa.org/columns/colm/cardcolm200906.html>)
11. "The Yummie Deal and Variations," MAA's *Card Colm*, April 2009  
(<http://www.maa.org/columns/colm/cardcolm200904.html>)
12. "Esteem Synergism," MAA's *Card Colm*, February 2009  
(<http://www.maa.org/columns/colm/cardcolm200902.html>)
13. "What's Black and Red and Red All Over," MAA's *Card Colm*, December 2008  
(<http://www.maa.org/columns/colm/cardcolm200901.html>)
14. "Monge Shuffle Cliques," MAA's *Card Colm*, October 2008  
(<http://www.maa.org/columns/colm/cardcolm200810.html>)
15. "(A) Pi Evolved Set-Harmonic Split Drill," MAA's *Card Colm*, August 2008  
(<http://www.maa.org/columns/colm/cardcolm200808.html>)
16. "Sum-Rich Circulants," MAA's *Card Colm*, June 2008  
(<http://www.maa.org/columns/colm/cardcolm200806.html>)
17. "Projective Geometry (The Fano Plane)," MAA's *Card Colm*, April 2008  
(<http://www.maa.org/columns/colm/cardcolm200804.html>)
18. "Additional Certainties," MAA's *Card Colm*, February 2008  
(<http://www.maa.org/columns/colm/cardcolm200803.html>)
19. "Plurality Events, Standard Deviations, and Skewed Perspectives," MAA's *Card Colm*, December 2007  
(<http://www.maa.org/columns/colm/cardcolm200712.html>)

20. "A Magic Timepiece Influenced by Martin Gardner (Celebrating His 93rd Birthday Incidentally)," MAA's *Card Colm*, October 2007  
(<http://www.maa.org/columns/colm/cardcolm200710.html>)
21. "Sixty Alpha Omegas," MAA's *Card Colm*, August 2007  
(<http://www.maa.org/columns/colm/cardcolm200708.html>)
22. "Gibonacci Bracelets," MAA's *Card Colm*, June 2007  
(<http://www.maa.org/columns/colm/cardcolm200706.html>)
23. "Magic Circles of Eight," MAA's *Card Colm*, April 2007  
(<http://www.maa.org/columns/colm/cardcolm200704.html>)
24. "Quasi-Masked Forcing Kind of Magic Squares," MAA's *Card Colm*, February 2007  
(<http://www.maa.org/columns/colm/cardcolm200702.html>)
25. "Quantitative Reasoning in Small Groups," MAA's *Card Colm*, December 2006  
(<http://www.maa.org/columns/colm/cardcolm200612.html>)
26. "Martin Gardner's Magic Spells," MAA's *Card Colm*, October 2006  
(<http://www.maa.org/columns/colm/cardcolm200610.html>)
27. "The Second Norman Invasion," MAA's *Card Colm*, August 2006  
(<http://www.maa.org/columns/colm/cardcolm200608.html>)
28. "Better Poker Hands Guaranteed," MAA's *Card Colm*, June 2006  
(<http://www.maa.org/columns/colm/cardcolm200606.html>)
29. "Bill Simon's Sixty-Four Principle," MAA's *Card Colm*, April 2006  
(<http://www.maa.org/columns/colm/cardcolm200604.html>)
30. "Many Fold Synergies," MAA's *Card Colm*, February 2006  
(<http://www.maa.org/columns/colm/cardcolm200603.html>)
31. "Luckation is Everything," MAA's *Card Colm*, December 2005  
(<http://www.maa.org/columns/colm/cardcolm200512.html>)
32. "Subtraction is Addictive," MAA's *Card Colm*, October 2005  
(<http://www.maa.org/columns/colm/cardcolm200510.html>)
33. "The First Norman Invasion," MAA's *Card Colm*, August 2005  
(<http://www.maa.org/columns/colm/cardcolm200508.html>)
34. (with Sylvia Bozeman) "Experiences in Attracting Women to Mathematics at Spelman College" (based on a talk given at a special session on *Innovative Mathematics Majors in Small/Medium Departments*, MAA Mathfest, Albuquerque, New Mexico, August 4, 2005), at  
(<http://persweb.wabash.edu/facstaff/axtellm/Curriculum%20Special%20Session/Colm.html>, August 2005)
35. "A Little Erdős/Szekeres Magic," MAA's *Card Colm*, June 2005  
(<http://www.maa.org/columns/colm/cardcolm200506.html>)
36. "The Down Under Deal (*aka* the Australian Shuffle)," MAA's *Card Colm*, April 2005  
(<http://www.maa.org/columns/colm/cardcolm200504.html>)
37. "Fitch Four Glory," MAA's *Card Colm*, February 2005  
(<http://www.maa.org/columns/colm/cardcolm200502.html>)
38. "Sheer Luck," MAA's *Card Colm*, December 2004  
(<http://www.maa.org/columns/colm/cardcolm200412.html>)

39. “Low Down Triple Dealing,” MAA’s *Card Colm*, October 2004 ([http://www.maa.org/columns/colm/cardcolm10\\_04.html](http://www.maa.org/columns/colm/cardcolm10_04.html)). Also published in MAA Focus (<http://www.maa.org/pubs/nov04.pdf>) November 2004 (dedicated to Martin Gardner on the occasion of his 90th birthday)
40. “Mathematical Card Tricks,” as guest columnist AMS’s *What’s New in Mathematics*, October 2000 (<http://www.ams.org/featurecolumn/archive/mulcahy1.html>)
41. “Life By The Numbers—PBS series on Mathematics,” review for *MAA Online*, June 1998 (<http://www.maa.org/features/lifebyTV.html>)
42. “Mathematics scores at the Academy Awards,” article in *MAA Online*, March 1998 (<http://www.maa.org/news/oscars.html>)
43. “Generous mathematical offerings at landmark AAAS meeting,” article in *MAA Online*, November 1997 (<http://www.maa.org/news/aaas.html>)

### Workshops/ Minicourses/ Short Courses presented

1. (given with Jeffrey Ehme) “The Mathematical Basics of Cryptography” (MAA minicourse), Joint Winter Meeting, Washington, DC, January 6 & 8, 2009
2. (given with Jeffrey Ehme) “The Mathematical Basics of Cryptography” (MAA minicourse), Joint Winter Meeting, San Diego, California, January 6 & 8, 2008
3. “An Introduction to Mathematical Card Tricks” (REU workshop), Clemson University, Clemson, South Carolina, June 19, 2007
4. “Hands-On Geometry Explorations” (REU workshop), Clemson University, Clemson, South Carolina, June 18–19, 2007
5. (given with Jeffrey Ehme) “The Mathematical Basics of Cryptography” (MAA minicourse), Joint Winter Meeting, New Orleans, Louisiana, January 5 & 7, 2007
6. “Alternative Approaches to Geometry” (faculty workshop), Project NExT session, Brown University, Providence, Rhode Island, August 11, 2004
7. (with Jeffrey Ehme) “An Introduction to Mathematical Card Tricks” (MAA minicourse), Joint Winter Meeting, Phoenix, Arizona, January 7 & 9, 2004
8. “Introduction to Wavelets,” University of Oriente, Santiago de Cuba, Cuba, March, 2003
9. “The Curves and Surfaces of the Digital Age,” University of Oriente, Santiago de Cuba, Cuba, March, 2003
10. “Introduction to Wavelets,” Instituto de Cibernetica Matematica y Fisica (ICIMAF), Havana, Cuba, March, 2003
11. “The Curves and Surfaces of the Digital Age,” Instituto de Cibernetica Matematica y Fisica (ICIMAF), Havana, Cuba, March, 2003
12. (with Derek Smith) “Mathematical Card Tricks” (2 day minicourse), *Math Jubilee*, University of Georgia, Athens, Georgia, April 12–13, 2002
13. (with Jeffrey Ehme) “Mathematical Card Tricks” (MAA minicourse), Joint Winter Meeting, San Diego, California, January 7 & 9, 2002
14. “Mathematical and Self-Working Magic” (Teach-a-Trick Session), Georgia Magic Club – International Brotherhood of Magicians Ring 9, Atlanta, Georgia, December 17, 2001

15. (with Jeffrey Ehme) “Mathematical Card Tricks” (MAA minicourse), Mathfest ’01, Madison, Wisconsin, August 2 & 4, 2001
16. “Image Compression Using Wavelets,” International Conference CIMAFA 2001 (6th Symposium on Mathematics and 4th Italo-Latinoamerican Conference on Industrial and Applied Mathematics), Havana, Cuba, March 23, 2001
17. “The Curves and Surfaces of the Digital Age using Maple,” International Conference CIMAFA 2001 (6th Symposium on Mathematics and 4th Italo-Latinoamerican Conference on Industrial and Applied Mathematics), Havana, Cuba, March 22, 2001
18. (with Jeffrey Ehme) “A Hands-on Approach to Geometry” (MAA minicourse), Mathfest ’00, Los Angeles, California, August 3 & 5, 2000
19. “Alternative Approaches to Geometry” (faculty workshop), Project NEXt session, UCLA, Los Angeles, California, August 1, 2000
20. “The Curves and Surfaces of the Digital Age” (student workshop), MAA Oklahoma-Arkansas Section Meeting, Arkansas Technical University, Russellville, Arkansas, March 31, 2000
21. (with Jeffrey Ehme) “Introduction to Mathematical Card Tricks” (MAA short course), 79th Annual MAA Southeastern Section Meeting, Univ. of North Carolina, Charlotte, North Carolina, March 10, 2000
22. (with Jeffrey Ehme) “The Curves and Surfaces of the Digital Age” (MAA minicourse), Joint Winter Meeting, Washington, DC, January 19–22, 2000
23. (with Jeffrey Ehme) “The Curves and Surfaces of the Digital Age” (MAA minicourse), MAA Mathfest ’99, Providence, Rhode Island, July 31–August 3, 1999
24. “Alternative Approaches to Geometry” (faculty workshop), Project NEXt’s *New Jobs, New Responsibilities, New Ideas*, Brown University, Providence, Rhode Island, July 30, 1999
25. (with Jeffrey Ehme) “The Curves and Surfaces of the Digital Age” (MAA short course) MAA Southeastern Section Meeting, Rhodes College, Memphis, Tennessee, March 12, 1999
26. “An Introduction to Wavelets” (MAA minicourse), Joint Winter Meeting, San Antonio, Texas, January 13–16, 1999
27. “A Hands-on Approach to Geometry” (MAA minicourse), MAA Mathfest ’98, Ryerson Polytechnical University, Toronto, Ontario, Canada, July 15–16, 1998
28. “A Hand-on Discovery-based Approach to Geometry” (MAA short course), 77th Annual MAA Southeastern Section Meeting, College of Charleston, Charleston, South Carolina, March 13, 1998
29. “Wavelets” (faculty workshop), University College Cork, Cork, Ireland, March 9, 1998
30. “Wavelets” (faculty workshop), Athlone Institute of Technology, Athlone, Ireland, March 5, 1998
31. “Smart use of computer technology as an enhancement to teaching, understanding and learning in Calculus, Linear Algebra and other mathematics courses” (faculty workshop), Project NEXt, Georgia Institute of Technology, Atlanta, Georgia, August 2–3, 1997
32. (Group Leader) “ATLAST Developer’s Workshop”, University of California, San Diego, California, June 25–28, 1997
33. “An Introduction to Wavelets” (MAA short course), 75th Anniversary MAA Southeastern Section Meeting, Spelman College & Georgia Institute of Technology, Atlanta, Georgia, March 13, 1997

34. (with Jeffrey Ehme) “The Elements of Computer Aided Geometric Design Using Maple” (faculty minicourse), Eighth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Houston, Texas, November 1995
35. “Visualising Algebra and Geometry,” Spelman Summer Science and Mathematics Institute for High School Teachers, June 21, 1995
36. “Media Manipulations of Mathematics,” Spelman Summer Science and Mathematics Institute for High School Teachers, June 21, 1995

## Presentations

1. “Celebration of Mind: The Mathematics, Magic & Mystery of Martin Gardner,” Department of Mathematics Colloquium, Emory University, Atlanta, Georgia, October 29, 2010
2. (invited) “Martin Gardner: Man of Mathematics, Magic & Mystery,” Sixth Annual Claude B. Dansby Dansby Lecture, Morehouse College, Atlanta, Georgia, October 21, 2010
3. “Celebration of Mind: The Mathematics, Magic & Mystery of Martin Gardner,” Public Lecture, Georgia Tech, Atlanta, Georgia, October 21, 2010
4. (invited) “Mathemagic with a Deck of Cards,” Mathematics Club, Clayton State University, Georgia, October 9, 2010
5. “The Life, Loves and Legacy of Martin Gardner,” Tennessee Mathematics Teachers Association / Mathematics Teachers of Tennessee Northwest Fall Conference, University of Tennessee at Martin, September 25, 2010
6. (invited) “A Little Mathemagic with a Deck of Cards,” Keynote Speaker, Tennessee Mathematics Teachers Association / Mathematics Teachers of Tennessee Northwest Fall Conference, University of Tennessee at Martin, September 24, 2010
7. “Toe Tack Trick,” Gathering 4 Gardner 9, Atlanta, Georgia, March 27, 2010
8. “Image Compression Introduction to Wavelets,” session on *Undergraduate Computational Education*, 34th SIAM Southeastern-Atlantic Section Conference, North Carolina State University, Raleigh, North Carolina, March 20, 2010
9. (invited) “Mathemagic with a Deck of Cards,” AWM Student Chapter *Excursion in Math*, Emory University, Atlanta, Georgia, November 14, 2009
10. (invited) “Mathemagic with a Deck of Cards on the Interval Between 5.700439718 and 80658175170943878571660636856403766975289505440883277824000000000000,” MAA Lecture for Students, MAA Mathfest 2009, Portland, Oregon, August 6, 2009
11. (invited) “Mathemagical Principles (Old and New) Applied to Card Tricks,” EDGE Program, Spelman College, Atlanta, Georgia, June 23, 2009
12. (invited) “An Image Compression Introduction to Wavelets,” Virginia Military Institute, Lexington, Virginia, April 9, 2009
13. (invited) “New Mathemagical Principles Applied to Card Tricks,” National University of Ireland, Galway, Ireland, March 12, 2009
14. (invited) “An Image Compression Introduction to Wavelets,” Mathematical Sciences Seminar, Dublin City University, Dublin, Ireland, March 10, 2009
15. (invited) “A Hands-On Approach to Geometry,” St. Patrick’s College, Drumcondra, Dublin, Ireland, March 10, 2009

16. (invited) “New Mathematical Principles Applied to Card Tricks,” Lecturer at MAA Alabama State Dinner, Jacksonville State University, Jacksonville, Alabama, February 27, 2009
17. (invited) “An Image Compression Introduction to Wavelets” (at MAA session on *Wavelets in Undergraduate Education*), Joint Winter Meeting, Washington, DC, January 6, 2009
18. (invited, with Tim Chartier) “Six Fibs and Videotape” (at MAA session on *Performing Mathematics*), Joint Winter Meeting, Washington, DC, January 5, 2009
19. (invited) “Mathemagical Card Tricks,” Sonia Kovalevsky High School Mathematics Day, Emory University, Atlanta, Georgia, May 8, 2008
20. “How to Perform Mathematical Miracles with a Deck of Cards,” Virginia Tech, Blacksburg, Virginia, April 30, 2008
21. (invited) “Mathemagic with a Deck of Cards,” Virginia Military Institute, Lexington, Virginia, April 29, 2008
22. “New Mathematical Principles Applied to Card Tricks,” Carleton College, Northfield, Minnesota, April 17, 2008
23. (invited) “New Mathematical Principles Applied to Card Tricks,” University of St. Thomas, St. Paul, Minnesota, April 16, 2008
24. (invited) “The Curves and Surfaces of the Digital Age,” University of St. Thomas, St. Paul, Minnesota, April 15, 2008
25. “Mathemagic with a Deck of Cards,” University of Oklahoma, Norman, Oklahoma, March 31, 2008
26. “An Introduction to Wavelets via Image Compression,” University of Oklahoma, Norman, Oklahoma, March 31, 2008
27. “His Genetic Evolution—One to Eight Inclusive (The g4g8 Bracelet),” Gathering 4 Gardner 8, Atlanta, Georgia, March 30, 2008
28. “How to Perform Mathematical Miracles with a Deck of Cards,” Dublin City University, Dublin, Ireland, February 12, 2008
29. “Mathemagic with a Deck of Cards,” St. Patrick’s College, Drumcondra, Dublin, Ireland, February 12, 2008
30. “An Introduction to Wavelets via Image Compression,” Maths Society, University College Dublin, Dublin, Ireland, February 11, 2008
31. “An Earnest, Hamming Way to do Magic,” Shannon Institute - Algebra Seminar, University College Dublin, Dublin, Ireland, February 11, 2008
32. “An Image Compression Introduction to Wavelets,” Department of Mathematics Colloquium, Queens University, Belfast, Ireland, February 8, 2008
33. “An Image Compression Introduction to Wavelets,” Department of Mathematics Seminar, University of Limerick, Limerick, Ireland, February 5, 2008
34. “An Image Compression Introduction to Wavelets,” Applied Mathematics Seminar, University College Cork, Cork, Ireland, January 24, 2008
35. (invited) “Mathemagic with a Deck of Cards,” Belvedere College, Dublin, Ireland, January 22, 2008
36. (invited) “An Introduction to Image Compression,” Belvedere College, Dublin, Ireland, January 22, 2008

37. (with Neil Calkin) "Bracelets with Magic Applications," Joint Mathematics Meeting, San Diego, California, January 9, 2008
38. (with Ed Burger) "Re-thinking How We Introduce Mathematics to First Year Students," Joint Mathematics Meeting, San Diego, California, January 9, 2008
39. (invited) Public Interview (as Leonhard Euler) with Robert Schneider, Joint Mathematics Meeting, San Diego, California, January 6, 2008
40. "Using Mathematics in the Service of Magical Entertainment," Faculty Research Day, Spelman College, Atlanta, November 2, 2007
41. (invited) "Brain Tickling Mathematical Card Tricks," Atlanta Metropolitan College Math Club, Atlanta, Georgia, October 25, 2007
42. (invited) "Circular Reasoning in Mathematical Magic," 22nd Clemson Mini-Conference on Discrete Mathematics and Algorithms, Clemson University, Clemson, South Carolina, October 11, 2007
43. "Mathematical Card Tricks to Tickle the Brain" UGA Math Club, Athens, Georgia, September 25, 2007
44. "Gibonacci Magic" (in *Advances in Recreational Mathematics* session), MAA Mathfest 2007, San Jose, California, August 5, 2007
45. "Circling the (Magic) Square" (in *Advances in Recreational Mathematics* session), MAA Mathfest 2007, San Jose, California, August 5, 2007
46. "Exploring the Composition Laws of Small Groups with a Deck of Cards" (in *Fun and Innovative Teaching Techniques for an Abstract Algebra Class* session), MAA Mathfest 2007, San Jose, California, August 4, 2007
47. (invited) "Image Compression," Walton High School MathFest, Marietta, Georgia, April 21, 2007
48. (invited) "Mathematical Card Tricks," Walton High School MathFest, Marietta, Georgia, April 21, 2007
49. (invited) "New Mathematical Principles in Card Magic," (Mini-Lecture), Georgia Magic Club – International Brotherhood of Magicians Ring 9, Atlanta, Georgia, April 16, 2007
50. "Mathematics—A Minority Interest? Countering 'I Hate Math' for the Majority of Students," Spelman College's First Annual Teaching Day, Atlanta, Georgia, February 21, 2007
51. "Impossible Prediction Tricks," Department of Mathematics Seminar, Spelman College, Atlanta, Georgia, February 15, 2007
52. "The Gilbreath Principle in Mathematical Magic," Joint Mathematics Meeting, New Orleans, Louisiana, January 6, 2007
53. "Better Poker Hands Guaranteed" (in MAA *Entertaining with Math* session), Joint Mathematics Meeting, New Orleans, Louisiana, January 5, 2007
54. "When I'm Sixty-four: How New and Old Mathemagical Discoveries Can Be Combined to Ensure Winning Poker Hands," Department of Mathematics Seminar, Virginia Tech, Blacksburg, Virginia, June 23, 2006
55. (with Jeffrey Ehme) "Poker Faced," MAA Southeastern Section and SIAM Southeastern Atlantic Section Meeting, Auburn University, Auburn, Alabama, March 31, 2006
56. "Three Proofs and Three Variations of the Low Down Triple Dealing Principle," MAA Southeastern Section and SIAM Southeastern Atlantic Section Meeting, Auburn University, Auburn, Alabama, March 31, 2006

57. "Poker Faced," Gathering 4 Gardner 7, Atlanta, Georgia, March 16, 2006
58. "Fab Math" (in *Mathematics and Popular Culture* session), Joint Mathematics Meeting, San Antonio, Texas, January 14, 2006
59. (with Jeffrey Ehme) "Poker Faced," Joint Mathematics Meeting, San Antonio, Texas, January 13, 2006
60. (with Jeffrey Ehme) "An Earnest, Hamming Way to do Magic," Joint Mathematics Meeting, San Antonio, Texas, January 13, 2006
61. (invited) "A Temporary Solution to a Permanent Problem?" (in *Permanent Use of Temporary Faculty: The Status of Non-ladder Faculty in Departments of Mathematics* session, sponsored by the Joint Committee on Teaching Assistants and Part-Time Instructors (TA/PTI)), Joint Mathematics Meeting, San Antonio, Texas, January 12, 2006
62. "An Introduction to Wavelets via Image Compression," Temple University, Philadelphia, Pennsylvania, November 22, 2005
63. (invited) "Magic with Math—Eine Kleine Nachtmagie," BAMA (Bay Area Mathematical Adventures) Lecture, Santa Clara University, Santa Clara, California, November 19, 2005
64. "Mathemagical Drama: It's As Easy As Aodh, Bea, C & D," San Jose State University, San Jose, California, November 18, 2005
65. "Wavelets made easy," MAA Seaway Section Meeting, SUNY Geneseo, Geneseo, New York, October 29, 2005
66. (invited Banquet Speaker) "Eine Kleine Nachtmagie," MAA Seaway Section Meeting, SUNY Geneseo, Geneseo, New York, October 28, 2005
67. "Questionable mathematics with a shuffled deck," MAA Mathfest 2005, Albuquerque, New Mexico, August, 2005
68. "Mathematical Idol 2005" (at session on *Nifty Examples in Discrete Math*), MAA Mathfest 2005, Albuquerque, New Mexico, August, 2005
69. (with Sylvia Bozeman) "Experiences in Attracting Women to Mathematics at Spelman College" (at session on Innovative Mathematics Majors in Small/Medium Departments), MAA Mathfest, Albuquerque, New Mexico, August 4, 2005  
(<http://persweb.wabash.edu/facstaff/axtellm/Curriculum%20Special%20Session/Colm.html>)
70. "Mathematical Principles in Card Tricks" (Mini-Lecture), Georgia Magic Club – International Brotherhood of Magicians Ring 9, Atlanta, Georgia, January 17, 2005
71. "An unbeatable deal in card tricks," Joint Mathematics Meeting, Atlanta, Georgia, January 5, 2005
72. "An ESPeriment with cards," MAA Mathfest 2004, Providence, Rhode Island, August 14, 2004
73. (invited) "Mathematical Card Tricks," Emory Math Club, Emory University, Atlanta, Georgia, April 15, 2004
74. "How to have fun with a deck of cards," Dublin Area Mathematical Colloquium, University College Dublin, Dublin, Ireland, March 29, 2004
75. "Craggy Island Connivery (*aka* How to perform mathematical miracles with a deck of cards!)," Maths Society, University College Dublin, Dublin, Ireland, March 25, 2004
76. "Mathematical Magic 101," *Faculty Council Brown Bag Lunch Series*, Spelman College, Atlanta, Georgia, Oct 14, 2003

77. (invited) “How to Pack More Into Your (Digital) Suitcase (An Introduction to Wavelets),” Saint Louis University, Madrid, Spain, April 9, 2003
78. (with Jeffrey Ehme, Aminah Perkins and Andrea Warren) “A Trick for Introducing Algebraic Coding Theory,” 81st Anniversary MAA Southeastern Section Meeting, Clemson University, Clemson, South Carolina, March 21, 2003
79. “Writing in Math Courses,” Writing Across the Curriculum Faculty Seminar, Georgia State University, Atlanta, Georgia, May 13, 2002
80. (invited) “An Introduction to Wavelets via Image Compression,” *Math Jubilee*, University of Georgia, Athens, Georgia, April 13, 2002
81. (with John H. Conway) “Mathematical Card Tricks,” at Gathering 4 Gardner 5, Atlanta, Georgia, April 7, 2002
82. “Five Card Tricks Using Discrete Math,” Department of Mathematics Seminar, Spelman College, February 26, 2002
83. (invited) “Mathematical Magic: Card Tricks and More,” North Georgia College & State University, Dahlonega, Georgia, December 6, 2001
84. (invited) “Wavelets and Image Compression,” Samford University, Birmingham, Alabama, October 11, 2001
85. (with Jeffrey Ehme) “Morphing Erdős Into Card Tricks,” MAA Mathfest '01, Madison, Wisconsin, August 2, 2001
86. (with Jeffrey Ehme and Ron Gould) “The Further Adventures of Two Mathmagicians in Madison,” MAA Mathfest '01, Madison, Wisconsin, August 2, 2001
87. (invited) “Mathematical Card Tricks”, Kappa Mu Epsilon Banquet Speaker, Georgia College and State University, Milledgeville, Georgia, April 11, 2001
88. “Using WebCT in a math for non-math-majors course”, 13th Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Atlanta, Georgia, November 19, 2000
89. “Card Tricks Anybody Can Do”, Department of Mathematics Seminar, Spelman College, October 24, 2000
90. “Fitch Cheney’s Five-Card Trick and Generalizations”, MAA Mathfest 2000, UCLA, Los Angeles, California, August 3, 2000
91. (invited) “Using the Web in a Course,” Project NExT special session, UCLA, Los Angeles, California, August 2, 2000
92. (invited) “Fitch Cheney’s Five-Card Trick and Generalizations”, MAA Oklahoma-Arkansas Section Meeting, Arkansas Technical University, Russellville, Arkansas, April 1, 2000
93. “Using the Web for a math for non-math-majors course”, 79th Annual MAA Southeastern Section Meeting, UNC Charlotte, Charlotte, North Carolina, March 11, 2000
94. “Fitch Cheney’s Five-Card Trick and Generalizations”, 79th Annual MAA Southeastern Section Meeting, UNC Charlotte, Charlotte, North Carolina, March 10, 2000
95. “Using WebCT in a math for non-math-majors course”, 12th Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Burlingame, California, November 5, 1999
96. “Multimedia and Multidisciplinary Mathematical Explorations”, 12th Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Burlingame, California, November 5, 1999

97. "Applied Curves & Surface Explorations with Maple", MAA Mathfest '99, Providence, Rhode Island, August 2, 1999
98. "Using Matlab to Explore Topics in Image Processing", MAA Mathfest '99, Providence, Rhode Island, August 2, 1999
99. " $a^2 + b^2 = c^2$ ? A down-to-earth look at Pythagoras' theorem", MAA Mathfest '99, Providence, Rhode Island, August 1, 1999
100. "An Introduction to Wavelets via Image Compression," Fourier Transforms and Wavelet Theory Workshop, Spelman College, June 2, 1999
101. "Image Acquisition, Image Processing and Remote Sensing", 9th Annual Environmental Awareness Week, Spelman College, April 24, 1999
102. "Multimedia and Multidisciplinary Mathematical Explorations", NCUR '99 (Thirteenth National Conference on Undergraduate Research), University of Rochester, Rochester, New York, April 8, 1999
103. (invited) "The Curves and Surfaces of the Digital Age", 16th Annual Conference on Undergraduate Mathematics, Rose-Hulman Institute of Technology, Terre Haute, Indiana, March 20, 1999
104. (invited) "Wavelets—a new tool for imaging, graphics and Hollywood", 16th Annual Conference on Undergraduate Mathematics, Rose-Hulman Institute of Technology, Terre Haute, Indiana, March 19, 1999
105. " $a^2 + b^2 = c^2$ ? A down-to-earth look at Pythagoras theorem," MAA Southeastern Section Meeting, Rhodes College, Memphis, Tennessee, March 12, 1999
106. (invited) "An Introduction to Wavelets and Image Compression," Department of Mathematics Colloquium Lecture, Clark Atlanta University, Atlanta, Georgia, February 10, 1999
107. "Geometry is Alive—Long Live Geometry!", *Geometry In The Classroom In The Next Millennium*, MAA Contributed Paper Session, Winter Meeting of the AMS/MAA, San Antonio, Texas, January 14, 1999
108. (with John Rossi) "Why teach Singular Value Decomposition?", Eleventh Annual ICTCM (International Conference on Technology in Collegiate Mathematics), New Orleans, Louisiana, November 21, 1998
109. (with Jeffrey Ehme) "Curves and Surfaces Using Maple," Annual ICTCM (International Conference on Technology in Collegiate Mathematics), New Orleans, Louisiana, November 21, 1998
110. "Retraining Management and Workers: New Production Line and Quality Control Techniques That Work," 77th Annual MAA Southeastern Section Meeting, College of Charleston, Charleston, South Carolina, March 14, 1998
111. "Getting Images On and Off the World Wide Web," 77th Annual MAA Southeastern Section Meeting, College of Charleston, Charleston, South Carolina, March 14, 1998
112. "To multiply, or not: that is the question," 77th Annual MAA Southeastern Section Meeting, College of Charleston, Charleston, South Carolina, March 13, 1998
113. (invited) "An Introduction to Wavelets", University College Galway, Galway, Ireland, March 4, 1998
114. (invited) "Matrix Tricks for Image Compression", Letterkenny Institute of Technology, Letterkenny, Ireland, March 3, 1998
115. (invited) "An Introduction to Wavelets", University of Ulster Magee, Derry, Northern Ireland, March 2, 1998

116. (invited) “An Introduction to Wavelets”, University College Dublin, Dublin, Ireland, February 27, 1998
117. “Exploring Frontiers in Geometry—Looking Back and Looking Forward”, part of *Exploring New Frontiers in Geometry: in the World Around Us and in Our Classrooms*, a symposium at the American Association for the Advancement of Science AMSIE’98, Philadelphia, Pennsylvania, February 13, 1998
118. “An Introduction to Wavelets”, University College Dublin, Dublin, “Using Wavelets to Speed Up Image Transmission on the Web,” Department of Mathematics & Computer Science, Georgia College and State University, Milledgeville, Georgia, September 23, 1997
119. “Undergraduate Research in Mathematics with Multimedia Applications,” MAA Mathfest ’97, Atlanta, Georgia, August 3, 1997
120. (with David Henderson & Daina Taimina) “Living Geometry for Liberal Arts Majors: Hand-on and Discovery-based Approaches,” MAA Mathfest ’97, Atlanta, Georgia, August 2, 1997
121. “Wavelets,” ATLAST Developer’s Workshop, University of California at San Diego, La Jolla, California, June 25–28, 1997
122. “Geometry for Globe Dwellers in the 21st Century,” Tenth Annual Mathematics Conference at DeKalb College, Clarkston, Georgia, May 3, 1997
123. “Explorations at the Interface of Mathematics and Computer Science,” Faculty Undergraduate Research Network Forum, NCUR ’97 (Eleventh National Conference on Undergraduate Research), University of Texas at Austin, Texas, April 24, 1997
124. “Digital Image Analysis in Environmental Sciences,” 7th Annual Environmental Awareness Week, Spelman College, Atlanta, Georgia, April 22, 1997
125. (with John Rossi & Richard Elderkin) “ATLAST—A New Approach To Singular Value Decomposition,” 75th Anniversary MAA Southeastern Section Meeting, Spelman College & Georgia Institute of Technology, Atlanta, Georgia, March 14, 1997
126. (invited) “Wavelets Made Easy,” Department of Mathematics, The Citadel, Charleston, South Carolina, February 25, 1997
127. “Introduction to Wavelets,” Department of Mathematics, Spelman College, Atlanta, Georgia, February 11, 1997
128. Richard Elderkin (with Colm Mulcahy & John Rossi) “Singular Value Decomposition as a Last Lecture for Linear Algebra Courses,” Joint Winter Meeting, San Diego, California, January 8, 1997
129. (invited) “An Introduction to Wavelets via Image Compression,” Department of Mathematics, Emory University, Atlanta, Georgia, December 6, 1996
130. “Image Compression via Wavelets,” Ninth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Reno, Nevada, November 9, 1996
131. (with John Rossi & Richard Elderkin) “Singular Decomposition Made Easy,” Ninth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Reno, Nevada, November 9, 1996
132. (with Jeffrey Ehme) “Computer Aided Geometric Design,” Ninth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Reno, Nevada, November 8, 1996
133. “Rational Points On Elliptic Curves,” Ninth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Reno, Nevada, November 8, 1996

134. (invited) "Image Compression Using Wavelets," Department of Mathematics, Carnegie Mellon University, Pittsburgh, Pennsylvania, June 18, 1996
135. "Matrices and the World Wide Web," Ninth Annual Mathematics Conference at DeKalb College, Clarkston, Georgia, April 27, 1996
136. "Wavelets Made Easy," Mathematical Association of America Regional Meeting, University of Alabama in Huntsville, Huntsville, Alabama, April 12, 1996
137. "Image Compression Using Wavelets," Eighth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Houston, Texas, November 1995
138. "Rational Points on Elliptic Curves," Eighth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Houston, Texas, November 1995
139. "Using Maple to Explore The Basics of Computer Aided Geometric Design," SIAM Geometric Design Meeting, Nashville, Tennessee, November 1995
140. "Using Maple to Explore The Basics of Computer Aided Geometric Design," ISSAC (International Symposium on Symbolic and Algebraic Computation), Concordia University, Montreal, Quebec, Canada, July 12, 1995
141. "Getting The Picture—The Basics Of Image Processing," Eighth Annual Mathematics Conference at DeKalb College, Clarkston, Georgia, April 29, 1995
142. "Computer Aided Geometric Design—A Model For An Undergraduate Seminar," Faculty Undergraduate Research Network Forum, NCUR'95 (Ninth National Conference on Undergraduate Research), Union College, Schenectady, New York, April 21, 1995
143. "The Mathematics of Computer Graphics," Center for Scientific Applications of Mathematics Faculty Seminar, Spelman College, November 22, 1994
144. "The Mathematical Elements Of Computer Aided Geometric Design," Seventh Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Orlando, Florida, November 19, 1994
145. "The Representation Theorem," AMS Meeting, University of Chicago, Chicago, Illinois, May 1989
146. (invited) "Spaces of Signatures," conference on Quadratic Forms and Real Algebraic Geometry, Oregon State University, Corvallis, Oregon, July 24–26, 1986
147. "Quadratic Forms & Valuations," Department of Mathematics Colloquium, Kent State University, Kent, Ohio, October 14, 1983

#### **Workshops/ Minicourses/ Short Courses attended**

1. "Mathematics and Politics" (MAA/PREP workshop), Williams College, Williamstown, Massachusetts, June 15–20, 2008
2. "Implementing Biology Across the Mathematics Curriculum," (MAA Short Course), MAA Mathfest 2007, San Jose, California, August 1–2, 2007
3. "Wavelets and Applications—A Multi-Disciplinary Undergraduate Course with an Emphasis on Scientific Computing" (MAA/PREP workshop), University of St. Thomas, St. Paul, Minnesota, June 7–10, 2007
4. "Over the Fence: Mathematicians and Biologists Talk About Bridging the Curricular Divide" (workshop), Mathematical Biosciences Institute, The Ohio State University, Ohio, June 1–2, 2007

5. "More Music and Mathematics" (MAA minicourse), Joint Winter Meeting, New Orleans, Louisiana, January 6 & 8, 2007
6. "Computational and Mathematical Biology" (MAA/PREP workshop), Sweet Briar College, Amherst, Virginia, June 18–23, 2006
7. "Bio 2010: How Genes Act in Populations" (Faculty Resource Network Summer Seminar), NYU, New York, New York, June 12–16, 2006
8. "Cryptography, Security and the Internet," (MAA Shortcourse), MAA Southeastern Section and SIAM Southeastern Atlantic Section Meeting, Auburn University, Auburn, Alabama, March 31, 2006
9. "Geometry with History for Teaching Teachers" (MAA minicourse), MAA Mathfest, Albuquerque, New Mexico, August 5–6, 2005
10. "The Mathematics of Presidential and Other Elections" (MAA minicourse), MAA Mathfest, Albuquerque, New Mexico, August 4–6, 2005
11. "Teaching a Course in the History of Mathematics" (MAA minicourse), MAA Mathfest, Albuquerque, New Mexico, August 4–5, 2005
12. "Interactive Internet-based Multivariable Calculus" (MAA/PREP workshop), Brown University, Providence, Rhode Island, June 26–29, 2005
13. "Bio 2010: Integrative Approaches to Teaching Science" (Faculty Resource Network Summer Seminar), NYU, New York, New York, June 6–10, 2005
14. "Fair Enough? Mathematics of Equity" (MAA minicourse), Joint Winter Meeting, Atlanta, Georgia, January 6 & 8, 2005
15. "Teaching a Galois Theory for Undergraduates" (MAA minicourse), Joint Winter Meeting, Atlanta, Georgia, January 5 & 7, 2005
16. AMS "Workshop for Department Chairs and Department Leaders," Atlanta, Georgia, January 4, 2005
17. Acrobat/WebCT Workshop, Spelman College, June 3, 2002
18. "Financial Mathematics" (MAA minicourse), Joint Winter Meeting, San Diego, California, January 7–9, 2002
19. "Coding Theory" (MAA Short Course), UCLA, Los Angeles, California, August 1–2, 2000
20. Bush Faculty Development Workshop, Spelman College, August 16–24, 1999
21. Collaboratives to Integrate Research and Education (CIRE), Atlanta, Georgia, December 10–11, 1998
22. "Writing to Learn in the Disciplines," Comprehensive Writing Center Faculty Development Workshop, Spelman College, May 27–31, 1997
23. "ATLAST Developers," NSF Undergraduate Faculty Enhancement Workshop on Teaching of Linear Algebra, University of Washington, Seattle, Washington, August 13–16, 1996
24. "Dynamic Geometry Lab with Sketchpad" (MAA Minicourse), MAA Mathfest '96, University of Washington, Seattle, Washington, August 11–12, 1996
25. "Discovering the performer in you: An improv teaching workshop," MAA Workshop, MAA Mathfest '96, University of Washington, Seattle, Washington, August 11, 1996

26. "Teaching Undergraduate Geometry," NSF Undergraduate Faculty Enhancement Workshop, Cornell University, Ithaca, New York, June 10-15, 1996
27. "Digital Image Processing with Mathematica," Eighth Annual ICTCM (International Conference on Technology in Collegiate Mathematics), Houston, Texas, November 18, 1995
28. "Grasping Handle Graphics," Matlab Conference, Cambridge, Massachusetts, October 16, 1995
29. "Image Processing," Matlab Conference, Cambridge, Massachusetts, October 16, 1995
30. "Digital Signal Processing," Matlab Conference, Cambridge, Massachusetts, October 17, 1995
31. "Wavelets," Matlab Conference, Cambridge, Massachusetts, October 17, 1995
32. "Programming with OpenGL: an Introduction," ACM Siggraph '95 Conference, Los Angeles, California, August 6, 1995
33. "Wavelets and Their Applications to Computer Graphics," ACM Siggraph '95 Conference, Los Angeles, California, August 7, 1995
34. "Programming Open Inventor: an Object-Oriented OpenGL Toolkit," ACM Siggraph '95 Conference, Los Angeles, California, August 8, 1995
35. "ATLAST," NSF Undergraduate Faculty Enhancement Workshop on Teaching Linear Algebra, Seattle University, Seattle, Washington, June 21-24, 1995
36. "Wavelets," SIAM-SEAS Regional Meeting, The Citadel, Charleston, South Carolina, March 24, 1995
37. "Basic Issues in Computer Aided Visualization," The Geometry Center, Minneapolis, Minnesota, August 13-14, 1994
38. "Wavelets," University of Alberta, Edmonton, Alberta, Canada, June 13-14, 1994
39. "Computer Graphics," Boeing Computer Services Faculty Development Workshop, Clark Atlanta University, Atlanta, Georgia, May 17-20, 1994

### Professional Service

1. Consultant and Mentor for Project NExT, 2008-
2. MAA Subcommittee on Short Courses, 2007-
3. MAA Committee on Minority Participation in Mathematics, 2006-
4. Bi-monthly columnist (*Card Colm*) at MAA Online (<http://www.maa.org/columns.html>), 2004-
5. *MAA Focus* Editorial Board, 2003-
6. BIO SIGMAA Electronic Communications Manager, 2006-2007
7. *MAA Online* Editorial Board, 2003-2007
8. MAA's *Math Horizons* Editorial Board, 2003-2008
9. Banquet Organizing Committee, Infinite Possibilities Conference, Spelman College, April 2005
10. MAA Mathfest 2004 (Providence, RI) Program Committee (proposed 2 of the 3 plenary speakers)
11. MAA Minicourse Committee, 2000-2006 (Local organizer Atlanta meeting, January 2005)

12. MAA *Mathematics Magazine* reviewer, 2003–2004
13. Consultant for Project NExT, 1997–2002
14. Co-organized (with Clint McCrory) “Math Jubilee” at University of Georgia, Athens, Georgia, April 12–13, 2002
15. Reviewer of online papers and mathlets for JOMA (The MAA’s Journal of Online Mathematics and its Applications), January–December 2001
16. Proposed and organized (with David Henderson and Barry Schiller) contributed paper session on “Geometry In The Classroom In The Next Millennium” at the Joint Winter Meeting, San Antonio, Texas, January 13–16, 1999
17. (with David Henderson) Organizer of *Exploring New Frontiers in Geometry: in the World Around Us and in Our Classrooms*, a whole-day symposium at the American Association for the Advancement of Science’s Annual Meeting and Science Innovation Exposition, Philadelphia, February 13, 1998
18. (with Farid Dowla) Organizer of *Wavelets: The Latest Big Splash in Science, Engineering, Imaging and Graphics*, a half-day symposium at the American Association for the Advancement of Science’s Annual Meeting and Science Innovation Exposition, Philadelphia, February 17, 1998
19. Helped organize 75th Anniversary MAA Southeastern Section Meeting, Spelman College and Georgia Institute of Technology, Atlanta, Georgia, March 13–15, 1997
20. Co-organized and ran a special two-day session on “Quadratic Forms and Real Algebraic Geometry” during the AMS meeting at the University of Chicago, May 1989

### Community Service

1. AIDS Walk Atlanta, 1997– (walker, team leader and fundraiser)
2. Volunteer and airshifter, WRFG Atlanta, 89.3 FM, non-commercial community radio, 1989–1991, 1995–2001 and 2005–; station webmaster, 1999–2001
3. Project Magic volunteer, 2002–2003 (performed magic in hospitals)
4. Habitat for Humanity, 1997–2002 (Faculty advisor to Spelman student chapter 1999–2002, Faculty & Staff volunteer coordinator 2000–2002 and 2003–2004)

October 30, 2010