

Robert D. Poodiack, Ph.D.

Associate Professor of Mathematics

A. Education

UNIVERSITY OF VERMONT, Doctor of Philosophy in Mathematical Sciences, 1999

Dissertation: Littlewood-Paley Theory in Two Parameters

Advisor: J. Michael Wilson, Ph.D.

WESTERN CONNECTICUT STATE UNIVERSITY, Master of Arts in Mathematics, 1994

CORNELL UNIVERSITY, Bachelor of Science in Computer Science, 1988

B. Relevant Employment

Associate Professor of Mathematics, Norwich University, 2005 – present.

Visiting Associate Professor of Mathematics, University of Vermont, Spring 2007.

Assistant Professor of Mathematics, Norwich University, 1999 - 2005.

Graduate Teaching Fellow, University of Vermont, 1994 - 1999.

Mathematics Lab Assistant, Western Connecticut State University, 1992 - 1993.

C. Concise Statement of Duties and Assignments at Norwich

Primary assignment at Norwich University consists of teaching introductory courses and advanced courses in pure and applied mathematics. Summary of courses taught:

MA101: Mathematics, A Liberal Art I

MA103: College Algebra

MA107: Precalculus

MA108: Applied Calculus

MA121: Calculus I

MA122: Calculus II

MA212: Finite Mathematics

MA223: Calculus III

MA224: Differential Equations

MA241: Mathematical Modeling and Computation

MA303: Advanced Calculus I

MA306: Discrete Mathematics

MA380: Theory of Computation

MA407: Vector Analysis

MA411: Senior Seminar

In addition to teaching duties, serve on various university and department standing and ad hoc committees. Academic advisor for mathematics majors, history majors, and students with an undeclared major.

D. Professional Activities

Research, Presentations and Papers:

Analysis

Some of my research and professional development is in the area of analysis. In particular, I work in the areas of Fourier and Harmonic Analysis, a branch that concentrates on developing functions as sums of building-block functions (i.e. wavelets).

"A Two-Parameter Littlewood-Paley Inequality using Random Dyadic Grids," (with J. M. Wilson), in preparation.

"A Fundamental Theorem of Algebra for the Perplex Numbers," (with K. LeClair), in preparation.

Solution to Problem 802 of the College Mathematics Journal, Submitted for publication, June 2005.

Solution to Problem 798 of the College Mathematics Journal, Submitted for publication, May 2005.

Solution to Problem 1682 of Mathematics Magazine, Submitted for publication, November 2003.

Solution to Problem 1668 of Mathematics Magazine, Submitted for publication, August 2003.

Solution to Problem 726 of the College Mathematics Journal, Submitted for publication, August 2002.

"A New Proof of a Two-Parameter Square Function Inequality," Contributed Paper, Joint Mathematics Meetings, San Diego, CA, January 2002.

"A Two-Parameter Littlewood-Paley Inequality," Contributed Paper, Joint Mathematics Meetings, New Orleans, LA, January 2001.

"A Slice of π ," Mathematics Awareness Month Colloquium, Norwich University, April 2000.

"A Two-Parameter Littlewood-Paley Inequality," Submitted for publication.

"Some interesting facts about square functions," Future Colleagues Talk, Spring Meeting of the Northeastern Section of the Mathematical Association of America, Keene State College, June 1998.

Courses and Workshops:

Mathematical Association of America, Short Course: Introduction to Flash, New Orleans, LA, January 2007.

Mathematical Association of America, Short Course: Introduction to Java, Atlanta, GA, January 2005.

"Don't Know Java? You Can Still Excel!" Workshop, Norwich University, March 2003.

Mathematical Association of America, Short Course: WeBWorK, New Orleans, LA, January 2001.
Mathematical Association of America, Short Course: The Heart of Mathematics: Mathematics Courses for Non-Majors, New Orleans, LA, January 2001.

Conferences and Meetings:

Joint Meetings of the Mathematical Association of America and the American Mathematical Society, New Orleans, LA, January 2007.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, Sacred Heart University, Fairfield, CT, November 2006.
Spring Meeting of the Northeastern Section of the Mathematical Association of America, Boston University, Boston, MA, June 2006.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, University of New Hampshire, Dunham, NH, November 2005.
Spring Meeting of the Northeastern Section of the Mathematical Association of America, Bates College, Lewiston, ME, June 2005.
Joint Meetings of the Mathematical Association of America and the American Mathematical Society, Atlanta, GA, January 2005.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, Worcester Polytechnic Institute, Worcester, MA, November 2004.
Spring Meeting of the Northeastern Section of the Mathematical Association of America, Roger Williams University, Bristol, RI, June 2004.
Hudson River Undergraduate Mathematics Conference, April 2004, April 2005.
15th Annual International Conference on Technology in Collegiate Mathematics, Orlando, FL, November 2002.
MathFest, National Meeting of the Mathematical Association of America, Burlington, VT, August 2002.
Joint Meetings of the Mathematical Association of America and the American Mathematical Society, San Diego, CA, January 2002.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, Bridgewater State College, November 2001.
Spring Meeting of the Northeastern Section of the Mathematical Association of America, Norwich University, June 2001.
Joint Meetings of the Mathematical Association of America and the American Mathematical Society, New Orleans, LA, January 2001.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, Providence College, November 2000.
Fall Meeting of the Northeastern Section of the Mathematical Association of America, Bradford College, November 1999.
Northeastern Section of the Mathematical Association of America Regional Dinner Meeting, St. Michael's College, April 1999.
Spring Meeting of the Northeastern Section of the Mathematical Association of America, Keene State College, June 1998.
Northeastern Section of the Mathematical Association of America Regional Dinner Meeting, Norwich University, April 1998.

Other Presentations and Professional Activity:

Mathematics Pedagogy and Technology

Since coming to Norwich, I have given more and more time to professional development in the area of mathematical pedagogy and technology. In particular, I have devoted time to the blending of the World Wide Web and computer algebra systems in teaching undergraduate mathematics.

"A Guide to Interactive Web Pages," Presenter – Computer Minicourse, International Conference on Technology in Collegiate Mathematics, Boston, MA, February 2007.
"Putting Mathematics on the World Wide Web," Presenter – Computer Demonstration, Association of Teachers of Mathematics in New England Conference, Killington, VT, October 2006.
"LiveMath in Calculus II and III," Contributed Paper Talk, Joint Mathematics Meetings, Atlanta, GA, January 2005.
"The Symmetric Derivative and the Unit Circle," D. McQuillan and R. Poodiack, submitted to The College Mathematics Journal, June 2004.
"The Symmetric Derivative and the Unit Circle," Faculty Scholarship Celebration, Norwich University, April 2004.
"Introduction to Mathematica," Presenter -- Computer Demonstration, International Conference on Technology in Collegiate Mathematics, Orlando, FL, November 2002.
"Introduction to LiveMath," Presenter -- Computer Minicourse, International Conference on Technology in Collegiate Mathematics, Orlando, FL, November 2002.
Faculty Showcase, Faculty In-Service Day Presentation, Norwich University, September 2002.
"Integrating the Web into Mathematics Instruction," Summer 4-Day Short Course, C. Frey, G. LaVarnway, R.Poodiack, presenters; Northeastern Section of the Mathematical Association of America, Plymouth State College, June 2002.
"Introduction to Mathematica," Mathematics Colloquium, Norwich University, January 2000.

Miscellaneous

"Circles, Triangles, and Squares: A New π for a New Trigonometry," Contributed Paper, Joint Meeting of the American Mathematical Association and the Mathematical Association of America, New Orleans, LA, January 2007.

"Paradoxes in Probability," Expanding Horizons Presentation, Essex High School, May 2005.
 "Circles, Triangles, and Squares: A Generalized Trigonometry," Faculty Scholarship Celebration, Norwich University, April 2005.
 Contributed Papers Coordinator, Northeastern Section of the Mathematical Association of America, November 2004 – present.
 "Generalizing π , Trigonometry, and the Unit Circle," Contributed Paper Talk, Fall Meeting of the Northeastern Section of the Mathematical Association of America, Worcester Polytechnic Institute, November 2004.
 "Generalizing π , Trigonometry, and the Unit Circle," submitted to The College Mathematics Journal, August 2004.
 "A Fibonacci Festival," Mathematics Awareness Month Colloquium, Norwich University, April 2004.
 "Paradoxes in Probability," Expanding Horizons Presentation, Colchester High School, March 2004.
 "Paradoxes in Probability," Expanding Horizons Presentation, Sharon Academy, December 2003.
 "Paradoxes in Probability," Expanding Horizons Presentation, St. Johnsbury Academy, October 2003.
 "Tootsie Roll Math," Mathematics Colloquium, Norwich University, October 2003.
 "When Wrong is Right," Expanding Horizons Presentation, Bellows Falls Union High School, May 2003.
 Organizer, Integration Bee, (Mathematics Awareness Month activity), Norwich University, 2003 to present.
 "When Wrong is Right," Expanding Horizons Presentation, Fair Haven High School, March 2003.
 Lecturer for F.E. exam, Engineering Division, Norwich University, March 2003, March 2004.
 "Paradoxes in Probability," Mathematics Colloquium, Norwich University, December 2002.
 Member, MAA Special Interest Group on Technology in the Classroom, 2002 -- present
 Member, Local Arrangements Committee, MathFest, Mathematical Association of America, Summer 2002.
 "The Game of Life," Mathematics Awareness Month Colloquium, Norwich University, April 2002.
 Organizer, Mathematics Awareness Month activities, Norwich University, April 2002.
 Chair, Local Arrangements Committee, Spring Meeting of the Northeastern Section of the Mathematical Association of America, Spring 2001.
 "When Wrong is Right," Expanding Horizons Presentation, Canaan High School, May 2001.
 "Counting, Probability and Monty Hall," Expanding Horizons Presentation, Black River High School, March 2001.
 "Some Interesting Properties of Numbers," Expanding Horizons Presentation, Colchester High School, May 2000.
 Analysis Seminar, University of Vermont, Spring 1998, Spring 1999, Spring 2000, Spring 2001.

E. University Committees and Other Assignments

Member of Book Committee for Calculus sequence, 2006.
 Leader, Mathematics Department Self Study, 2005 - 2006.
 Member, Book Committee for MA224, Spring 2004.
 Member, Departmental Committee on Number Theory Course, Fall 2003.
 Member, Departmental Committee on Mathematical Modeling Course, Fall 2003.
 Advisor, Student Chapter of Mathematical Association of America, 2003 to present.
 Member, Intellectual Property Policy Committee, Spring 2003 to Spring 2005.
 Member, Departmental Committee on Cryptography Course, Fall 2002.
 Member, Advisory Committee to Registrar on Technology, 2002.
 Chair, Committee on Academic Technology, January 2002 to present.
 Member, Book Committees for Calculus Sequence, Spring 2001, Spring 2005.
 Member, Departmental Search Committees, 2001 – 2006.
 Math/Sciences Division Representative, Academic Computing Advisory Committee (currently Committee on Academic Technology), September 2000 to present.
 Leader, Mathematica Users Support Group, 2000-2001.
 Member, Book Committee for MA107, Spring 2000.

F. Professional and Scholarly Awards, Honors and Memberships

Nominee for Vice Chair, Northeastern Section of the Mathematical Association of America, 2004, 2006.
Homer L. Dodge Faculty Award for Excellence in Teaching, Norwich University, 2005.
Higher Education Representative, Vermont Council of Teachers of Mathematics, October 2004 to May 2005.
John F. Kenney Award, Awarded to the top mathematics graduate student at the University of Vermont, 1999.
Who's Who Among America's Teachers, 1998, 2004.
 Mathematical Association of America, member, 1997 to present.
 American Mathematical Society, member, 1994 – 1999, 2004.