

# JASON J. MOLITIERNO

## Curriculum Vitae

Sacred Heart University  
Department of Mathematics  
5151 Park Avenue  
Fairfield, CT 06825-1000

### PERSONAL:

**Birth:** January 17, 1974, Waterbury, CT

**Phone:** (203) 396-8324

**E-mail:** MolitiernoJ@sacredheart.edu

### EDUCATION:

- **Ph.D.:** University of Connecticut, Storrs, CT. Date: August 2001.  
Dissertation Title: *Coefficient of Ergodicity Type Bounds for the Algebraic Connectivity of Graphs*  
Advisor: *Professor Michael Neumann*
- **M.S.:** University of Connecticut, Storrs, CT. Date: May 1999.
- **B.A.:** Connecticut College, New London, CT. Date: May 1996.  
Major in Mathematics, Minor in U.S. History, obtained a Connecticut State Teaching Certificate (grades 7-12).

### POSITIONS HELD:

- Assistant Professor of Mathematics; Sacred Heart University; Fairfield, CT; 2001–present.
- Graduate Teaching Assistant; University of Connecticut; Storrs, CT; 1997–2001.

## **TEACHING EXPERIENCE:**

### **Courses taught at Sacred Heart University:**

- MA 371, Real Analysis, Fall 2003.
- MA 101, Modern College Mathematics, Fall 2003.
- MA 261, Linear Algebra, Spring 2003.
- MA 110, Calculus for Decision Making, Spring 2003, Fall 2002.
- MA 253, Multivariable Calculus, Fall 2002.
- MA 140, Precalculus, Fall 2002, Fall 2001.
- MA 133, Statistics for Business Majors, Spring 2002.
- MA 151, Calculus I, Fall 2003, Spring 2002, Fall 2001.
- MA 152, Calculus II, Spring 2002.
- FS 101, Freshman Seminar, Fall 2001.

### **Courses taught at the University of Connecticut:**

- MATH 210, Multivariable Calculus, Spring 2001, Fall 1999.
- MATH 115, Calculus I, Fall 2000.
- MATH 227, Applied Linear Algebra, Summer 2000.
- MATH 167, Calculus Writing Workshop, Spring 2000.
- Tutored for the UConn Mentor Program at the Naag Center for Gifted and Talented Development, Summer 1999.
- MATH 113, Introduction to Calculus II, Spring 1999.
- MATH 112, Introduction to Calculus I, Fall 1998.
- MATH 101, Intermediate Algebra, Summer 1998, Summer 1999.
- MATH 106, Calculus for Business and Economics, Spring 1998.
- MATH 109, Algebra and Trigonometry, Spring 1997, Fall 1997.

### **Previous Teaching Experience:**

- Grade 7, mathematics and geography, Bennie Dover Jackson Middle School, New London, CT, Fall 1996.

### **PUBLICATIONS:**

- (with S. Fallat, S. Kirkland, and M. Neumann) "Graphs which are Laplacian Integral", submitted to Journal of Graph Theory, 2003.
- (with M. Neumann) "On operations involving adding vertices to tree-like graphs", submitted to Linear and Multilinear Algebra, 2003.
- (with M. Neumann) "On trees with perfect matchings", Linear Algebra and Applications , 362:75-85, 2003.
- (with S. J. Kirkland, M. Neumann, and B. L. Shader) "On graphs with equal algebraic and vertex connectivity", Linear Algebra and Applications, 341:45-56, 2002.
- (with S. J. Kirkland and M. Neumann) "The sharpness of a lower bound on the algebraic connectivity for maximal graphs", Linear and Multilinear Algebra, 48:237-46, 2001.
- (with M. Neumann) "The algebraic connectivity of two trees connected by an edge of infinite weight", ELA (Electronic Linear Algebra journal), 8:1-13, 2001.
- (with M. Neumann and B. L. Shader) "Tight bounds on the algebraic connectivity of a balanced binary tree", ELA (Electronic Linear Algebra journal), 6:62-71, 2000.

### **PRESENTATIONS:**

- To present "Making Concepts in Multivariable Calculus Less Abstract" at MathFest 2003 (hosted by the Mathematical Association of America) in Boulder, CO; August 2003.
- Presented "Graphs which are Laplacian Integral" at the Joint American Mathematical Society (AMS) and Mathematical Association of America (MAA) National Meeting; Baltimore, MD; January 2003.
- Presented "Making In-class Group Projects Work" (with Professors Hema Gopalakrishnan and Peter Loth) at the Faculty Institute held at Sacred Heart University, October 2002.
- Presented "The Algebraic Connectivity of Two Trees Connected by an Edge of Infinite Weight" at the Western Canada Linear Algebra Meeting (W-CLAM), University of Regina; Regina, SK; May 2002.
- Presented "Representing Graphs with Matrices – Pictures by Numbers" at Connecticut College; New London, CT; February 2002.
- Presented "The Algebraic Connectivity of Two Trees Connected by an Edge of Infinite Weight" at the Joint American Mathematical Society (AMS) and Mathematical Association of America (MAA) National Meeting; San Diego, CA; January 2002.
- Presented "Representing Graphs with Matrices – Pictures by Numbers" at the Northeastern Sectional Meeting of the Mathematical Association of America; Bridgewater State College; Bridgewater, MA; November 2001.
- Presented "The Sharpness of a Lower Bound on the Algebraic Connectivity for Maximal Graphs" at the Western Canada Linear Algebra Meeting (W-CLAM), University of Manitoba; Winnipeg, MB, Canada; May 2000.

### **CONFERENCES ATTENDED (without presenting):**

- MAA Northeast Sectional Spring Meeting at Massachusetts College of Liberal Arts, North Adams, MA; Spring 2003.
- MAA Northeast Sectional Fall Meeting at Framingham State College,

Framingham, MA; Fall 2002.

- MAA Summer MathFest, Burlington, VT; Summer 2002.
- MAA Northeast Section Spring Meeting at Williams College, Williamstown, MA; Spring 2002.

### **OTHER PROFESSIONAL ACTIVITIES:**

- Organized a Mathematical Association of America / Northeast Sectional dinner that took place at Sacred Heart University on April 30, 2003.
- Organized the presentation "Fun with Mathematics - How to be a Pariah at a Party" by Professor Dennis Luciano (Western New England College) given at Sacred Heart University on April 14, 2003.
- Serve on the National Council for Accreditation of Teacher Education (NCATE) committee, Sacred Heart University, 2003–present.
- Served on the Distinguished Teaching Award Committee of the Mathematical Association of America / Northeast Section, 2002-03.
- Section NExT fellow in the MAA - Northeast Section, 2002-03.
- Serve as Sacred Heart University's department liaison to the Mathematical Association of America, 2002-present.
- Serve on the Undergraduate Research Committee at Sacred Heart University, 2002–present.
- Serve on the Writing Across the Curriculum committee at Sacred Heart University, 2001–present.
- Serve as faculty advisor to both math majors and non-math majors, Sacred Heart University; 2001–present
- Served as a faculty advisor to incoming freshman at Freshman orientation, Sacred Heart University; Summers 2002 and 2003.

- Organized the presentation "Magic with Mathematics – Is the Formula Faster than the Eye?" by Professor Edward Burger (Williams College) given at Sacred Heart University on March 13, 2002.
- Took part in the designing of two new courses for the Department of Mathematics at Sacred Heart University: Differential Equations, Graph Theory; 2001-02.
- Served on the Search Committee for the Department of Mathematics at Sacred Heart University, Spring 2002.
- Refereed one paper for the journal "Linear Algebra and Applications", refereed one paper for the journal "Linear and Multilinear Algebra", and reviewed one book manuscript, 2002.
- Served as a faculty advisor to incoming freshman at Sacred Heart University; 2001-2. (This was in conjunction with the FS 101 course I taught in Fall 2001.)
- Refereed three papers for the journal "Linear Algebra and Applications" and one paper for the journal "Electronic Linear Algebra" during the period 1999–2001.

#### **AWARDS:**

- **Outstanding Teaching Assistant of the Year**, given by the Institute of Teaching and Learning at the University of Connecticut, 2000.
- **Constance Strange Graduate Community Award**, given by the Mathematics Department of the University of Connecticut, 2000.
- **Louis J. DeLuca Memorial Award**, given by the Mathematics Department at the University of Connecticut, 1999, for outstanding teaching.
- **Julia Wells Bower Mathematics Prize**, given by the Mathematics Department at Connecticut College, 1994, 1995, 1996.

**GRANTS:**

- **University Research and Creativity Grant**, given by Sacred Heart University, 2003, to support summer research.
- **University of Connecticut Dissertation Stipend**, given by the Institute of Teaching and Learning at the University of Connecticut, 2001, to support summer research.
- **Keck Undergraduate Science Program Research Grant**, given by the Keck Foundation, 1994, to support summer research.

**PROFESSIONAL ORGANIZATIONS:**

- Mathematical Association of America (department liaison)
- American Mathematical Society
- International Linear Algebra Society