

# Stephanie Fitchett

Harriet L. Wilkes Honors College  
Florida Atlantic University  
5353 Parkside Drive  
Jupiter, Florida 33458

(561) 799-8613  
FAX (561) 799-8602  
sfitchet@fau.edu  
<http://www.fau.edu/~sfitchet/>

## EDUCATION

**Ph.D.** Mathematics, May 1997, University of Nebraska–Lincoln  
**M.S.** Statistics, May 2007 (expected), Colorado State University  
**M.S.** Mathematics, December 1992, University of Nebraska–Lincoln  
**B.S.** Mathematics, December 1990, University of Nebraska–Lincoln  
Minors: Physics, History, Architecture

## RESEARCH INTERESTS

Spatial Statistical Modeling  
Algebraic Geometry and Commutative Algebra  
Undergraduate Mathematics and Statistics Education

## PROFESSIONAL EXPERIENCE

**Associate Professor of Mathematics**, Florida Atlantic University, Harriet L. Wilkes Honors College, 2004-present  
**Assistant Professor of Mathematics**, Florida Atlantic University, Harriet L. Wilkes Honors College, 1999-2004  
**Lecturer** (Teaching Postdoc), Duke University, Department of Mathematics, 1997-1999  
**Graduate Teaching Assistant**, University of Nebraska–Lincoln, Department of Mathematics, 1991-1997

## TEACHING AWARDS

**Award for Excellence in Undergraduate Teaching, 2002-2003**, Florida Atlantic University.  
**Exceptional Faculty Award, Harriet L. Wilkes Honors College**, 2002 MAC Awards, MacArthur Campus Student Government, Florida Atlantic University.  
**UNL Alumni Association Graduate Teaching Assistant Award**, 1996.  
**UNL Parents Association Recognition Awards for Contributions to Students**, 1996, 1992.  
**Outstanding Graduate Teaching Assistant Teaching Award**, UNL Department of Mathematics and Statistics, 1995.

## GRANT SUPPORT

**Graduate Research Assistant**, Environmental Protection Agency grant *Space-Time Aquatic Resources Modeling and Analysis Program (STARMAP)*, July 2005 – December 2006, Colorado State University (Principal Investigator Scott Urquhart).

**Principal Investigator**, National Science Foundation CCLI grant *Discovery-Based Science and Mathematics in an Environmental Context*, \$187,000, May 2001 – October 2004.

**International Travel Grant**, Division of Sponsored Research, Florida Atlantic University, funded travel to ‘Zero-dimensional subschemes and their applications’ in Naples, Italy, February 2000.

**Travel Grant**, Association for Women in Mathematics, funded travel to the Joint AMS/SMM Meeting in Oaxaca, Mexico, December 1997.

## PUBLICATIONS

J. K. Wetterer, L. D. Wood, C. Johnson, and S. Fitchett, Beach width, nest placement, and the occurrence of predaceous fire ants on sea turtle nests in South Florida, *in review*.

W. E. Meshaka, H. L. Cress, K. L. Kingsland, H. T. Smith, S. A. Fitchett, J. A. Moore, E. M. Cowan, *Hemidactylus* (House Gecko) Assemblage Dynamics on South Florida Buildings, *Journal of Kansas Herpetology* 17 (March 2006).

D. Marti, W. O’Brien, H. T. Smith, J. A. Moore and S. Fitchett, Endangered species, prescribed fires, and public resistance in a Florida scrub community, *Endangered Species Update* 22 (2005) 18-38.

J. Moore and S. Fitchett, Connecting Science to the Community at Florida Atlantic University, in *Invention and Impact: Building Excellence in Undergraduate Science, Technology, Engineering and Mathematics (STEM) Education*, American Association for the Advancement of Science, 2005.

S. Fitchett, Corrigendum to: “On bounding the number of generators for fat point ideals on the projective plane,” *Journal of Algebra* 276 (2004) 417-419.

S. Fitchett, Using the environment to bridge mathematics and the sciences, *Proceedings: Thirty-fifth Annual Meeting of the Florida Section of the Mathematical Association of America (Gainesville, Florida), March 2002*. David Kerr and Bill Rush eds. October 2002. Florida Section MAA.

S. Fitchett, Bezout’s Theorem: A taste of algebraic geometry, *Proceedings of the 2001 Meeting of the Florida Section of the Mathematical Association of America (Fort Myers, Florida), March 2001*. David Kerr and Bill Rush, eds. April 2002. Florida Section MAA.

B. Harbourne, S. Holay, and S. Fitchett, Resolutions of Ideals of Quasiuniform Fat Point Subschemes of  $\mathbf{P}^2$ , *Transactions of the AMS* 355 (2002) 593-608.

S. Fitchett, Using Environmental Science to Bridge Mathematics and the Sciences, *Proceedings of the 2nd International Conference on the Teaching of Mathematics at the Undergraduate Level (Hersonissos, Greece), July 1-6, 2002*. Published electronically on CD-ROM.

S. Fitchett, Generators for Fat Point Ideals on the Projective Plane, *Proceedings of Zero-dimensional Subschemes and their Applications (Naples, 2000)*, *Queen’s Papers in Pure and Applied Mathematics* 123 (2002) 77-83.

**PUBLICATIONS** (continued)

- S. Fitchett, Teaching with Duke's *Connected Curriculum Project* Material's: A User's Perspective, *Journal of Online Mathematics and its Applications (JOMA)* 2 (2002).
- S. Fitchett, B. Harbourne and S. Holay, Resolutions of Fat Point Ideals involving 8 General Points of  $\mathbf{P}^2$ , *Journal of Algebra* 244 (2001) 684-705.
- S. Fitchett, Maps of Linear Systems on Blow-ups of the Projective Plane, *Journal of Pure and Applied Algebra* 156 (2001) 1-14.
- S. Fitchett, Bounds for Numbers of Generators of Fat Point Ideals on  $\mathbf{P}^2$ , *Journal of Algebra* 236 (2001) 502-521.

**CURRICULAR MATERIALS**

- J. Bookman and S. Fitchett, Linear Correlation and Regression, The Connected Curriculum Project, 1999. <<http://www.math.duke.edu/education/modules2/materials/test/test/index.html>>
- L. Blake, S. Fitchett and D. Smith, Systems of Linear Equations, The Connected Curriculum Project, 1998. <<http://www.math.duke.edu/education/ccp/materials/linalg/sole/index.html>>
- S. Fitchett and D. Smith, LU Decomposition, The Connected Curriculum Project, 1998. <<http://www.math.duke.edu/education/ccp/materials/linalg/ludecomp/index.html>>
- S. Fitchett, Linear Transformations, The Connected Curriculum Project, 1998. <<http://www.math.duke.edu/education/ccp/materials/linalg/lintrans/index.html>>

**SENIOR THESIS ADVISING**

- Laura Lynch, *Factorization in  $\mathbf{Z}[\sqrt{-5}]$* , Senior Thesis, Wilkes Honors College, May 2004.
- Sarah York, *Factoring in a Timely Fashion*, Senior Thesis, Wilkes Honors College, August 2003.
- John R. Samuels, Jr., *Fractal Dimension: An Analysis of Different Definitions*, Senior Thesis, Wilkes Honors College, May 2003.

**OTHER INSTRUCTIONAL ACTIVITIES****Spreadsheets Across the Curriculum**

Mathematical resource person on NSF-funded project that included week-long workshops in which interdisciplinary teams developed spreadsheet-based classroom materials. Summer 2005.

**University of Nebraska-Lincoln/Lincoln Public Schools Algebra Workshop for Elementary and Middle School Teachers**

Instructor of three-credit summer professional development course, June 2003.

**Sonia Kovalevsky High School Math Day**

Instructor of seminar for high school math teachers at New College of Florida, October 2001.

**University of Nebraska-Lincoln ALL GIRLS/ALL MATH Summer Camp**

Instructor of cryptography lectures for high school girls, July 9-14, 2000.

**OTHER INSTRUCTIONAL ACTIVITIES** (continued)**Calculators and Calculus**

Co-organizer and presenter of one day workshops for graduate teaching assistants, faculty, and area high school teachers. Focus was on the use of the TI-85 graphing calculator in precalculus and calculus courses. August 1994, 1995.

**SELECTED CONFERENCE PRESENTATIONS**

*FAU's 'Parknership' with the Florida Park Service*, Joint Mathematics Meetings (Atlanta, Georgia), January 2005.

*Finding Information on Resolutions of Fat Points in  $P^n$* , AMS Regional Meeting (Nashville, Tennessee), October 2004.

*Connecting Science to Society*, Invention and Impact: Building Excellence in Undergraduate Science, Engineering and Mathematics (STEM) Education (Crystal City, Virginia), April 2004.

*Hilbert Functions for Fat Points*, Florida Section MAA Meeting (Orlando, Florida), February 2004.

*Learning in a Discovery-Based Science and Mathematics Setting*, 2003 MathFest (Boulder, Colorado), August 2003.

*Puzzles for Abstract Algebra*, 2003 Meeting of the Florida Section of the Mathematical Association of America (Jacksonville, Florida), February 2003.

*Bridging Mathematics and the Sciences Using Environmental Science*, 2nd International Conference on the Teaching of Mathematics at the Undergraduate Level (Hersonissos, Crete, Greece), July 2002.

*Bezout's Theorem: A taste of algebraic geometry*, 2001 Meeting of the Florida Section of the Mathematical Association of America (Fort Myers, Florida), March 2001.

*Rings, Strings, Blocks and Beads: Using Puzzles in Math for Liberal Arts*, Joint Mathematics Meetings (New Orleans, Louisiana), January 2001.

*Generators for Fat Point Ideals on the Projective Plane*, Zero-dimensional Subschemes and Their Applications (Naples, Italy), February 2000.

*HS Students Tackle Issues in Plant Growth*, Joint Mathematics Meetings (Washington D.C.), January 2000.

*Fat Point Ideals for 8 or fewer Points of the Projective Plane*, AMS Section Meeting (Denton, Texas), May 1999.

*Numerically Effective Divisors and Fat Points on  $P^2$* , Third Joint Meeting of the AMS and the SMM (Oaxaca, Mexico), December 1997.

*Minimal Generating Sets for Fat Point Ideals on  $P^2$* , Joint Mathematics Meetings (San Diego, California), January 1997.

## PROFESSIONAL AFFILIATIONS

**American Mathematical Society**, member since 1993.

**Association for Women in Mathematics**, member since 1993.

**Project NExT (New Experiences in Teaching)**

- Fellow, 1998
- Consultant, 2005

**Mathematical Association of America**, member since 1995.

- Member of Committee on the Teaching of Undergraduate Mathematics (CTUM), 2004-2006
- Florida Section MAA, Vice President for Site Selection, 2003-2004
- Florida Section MAA, President, 2005-2006
- Florida Section MAA, Newsletter Editor Elect, 2006-2007
- Member of Statistics, Quantitative Literacy and Environmental Mathematics SIGs

**The Mathematicians and Education Reform Forum**, member since 1998.

**The Consortium for Mathematics and Its Applications**, member since 2000.

**American Statistical Association**, member since 2003.