

CONTACT INFORMATION Bates College, 3 Andrews Rd, Lewiston, ME 04240
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EDUCATION **The University of Texas at Austin**, Austin, Texas USA

Ph.D., Mathematics, May 2009

- Thesis Title: Hypergeometric Functions in Arithmetic Geometry
- Advisor: Fernando Rodríguez-Villegas

Universidad Simón Bolívar, Sartenejas, Venezuela

Licenciatura en Matematicas, July 2001

- Senior Seminar Talk: Eisenstein's Reciprocity Law
- Advisor: Pedro Berrizbeitia

PUBLICATIONS **Research Publications**

An Algorithmic Approach to the Dwork Family, accepted for publication in Proceedings of WIN2—Women in Numbers 2, CRM Proceedings and Lecture Notes. arXiv:1202.5008.

Counting Points over Finite Fields and Hypergeometric Functions, accepted for publication in *Functiones et Approximatio Commentarii Mathematici*, arXiv:1201.3335v1.

Igusa class polynomials, embeddings of quartic CM fields, and arithmetic intersection theory, with Helen Grundman, Jennifer Johnson-Leung, Kristin Lauter, Bianca Viray, and Erika Wittenborn. WIN – Women in Numbers, Fields Institute Communications, vol. 60, Amer. Math. Soc., Providence, RI, 2011, pp. 35 – 60.

Expository Publications

Investigating Motives for L-function Computations, MAA FOCUS, Vol. 33, No. 1, 2013.

Road to Partition: Unveiling the Fractal Nature of Partition Numbers, MAA FOCUS, Vol. 31, No. 2, 2011.

My Summer at the Voice of America, Notices of the American Mathematical Society, February 2008.

Online Publications

PhD + epsilon: An early career mathematician blogs about her experiences and challenges (writer) (<http://blogs.ams.org/phdplus/>) Blog posts about twice a month, March 2011 - present.

2013 Joint Mathematics Meetings Blog, (<http://www.ams.org/blog/jmm2013/>), January 9-12, 2013.

2012 Joint Mathematics Meetings Blog, (<http://www.ams.org/blog/jmm2012/>), January 4-7, 2012.

Math Digest (contributor) (<http://www.ams.org/mathmedia/mathdigest/>) Two to three monthly summaries of articles about math in the media, February 2008 - December 2010.

2011 Joint Mathematics Meetings Blog, (<http://www.ams.org/blog/jmm2011/>), January 6-9, 2011.

2010 Joint Mathematics Meetings Blog, (<http://www.ams.org/blog/jmm2010/>), January 13-16, 2010.

2009 Joint Mathematics Meetings Blog, (<http://www.ams.org/blog/jmm2009/?p=14>), January 5-8, 2009.

2008 Joint Mathematics Meetings Blog, (<http://jmm08.pbwiki.com/>), January 6-9, 2008.

POSITIONS HELD	Assistant Professor Bates College	September 2009 - present
	Assistant Instructor University of Texas at Austin	August 2004 - May 2009
	Teaching Assistant University of Texas at Austin Universidad Simón Bolívar	August 2002 - August 2004 September 1998 - July 2001

INVITED TALKS

<i>Hypergeometric Functions, My Love</i> Junior Number Theory Seminar University of Texas at Austin	March 5, 2013
<i>From circles to circular counting: Intro to Arithmetic Geometry</i> UT Math Club University of Texas at Austin	February 27, 2013
<i>How to Rig an Election: Voting Systems and Arrow's Theorem</i> Sonia Kovalevsky High School Math Day Bates College	May 12, 2012
<i>The Discrete Log Problem: Keeping your secrets safe since the 1970s</i> Colby College Math Colloquium, Waterville, ME.	April 2, 2012
<i>Rational Points and Hypergeometric Functions</i> Hypatian Seminar (Seminar for female mathematics graduate students) University of California, Santa Barbara, CA	October 17, 2011
<i>The Dwork Family and Hypergeometric Functions</i> MIT Number Theory Seminar Cambridge, MA	March 8, 2011
<i>Hypergeometric Functions in Number Theory</i> CBB Algebra-Topology-Number Theory Collaboration Conference Bowdoin College, Brunswick, ME	March 5, 2011
<i>Arithmetic Geometry: From Circles to Circular Counting</i> Bowdoin College Colloquium Brunswick, ME	December 7, 2010
<i>Arithmetic Geometry: From Circles to Circular Counting</i> Vassar College Colloquium Poughkeepsie, NY	November 9, 2010
<i>The Dwork Family and Hypergeometric Functions</i> Algebra and Number Theory Seminar Brown University, Providence, RI	October 25, 2010

- The Dwork Family and Hypergeometric Functions* October 15, 2010
 Algebra and Number Theory Seminar
 Wesleyan University, Middletown, CT
- Arithmetic Geometry: From Circles to Circular Counting* March 1, 2010
 Colby College Math Colloquium, Waterville, ME.

CONTRIBUTED TALKS

- The Dwork Family and Hypergeometric Functions* October 1, 2011
 Maine-Québec Number Theory Conference, October 1 – 2, 2011
 University of Maine, Orono, ME
- The Dwork Family and Hypergeometric Functions (Poster)* September 17, 2011
 AWM Anniversary Conference, September 17 – 18, 2011
 Brown University, Providence, RI
- La Familia de Dwork y Funciones Hipergeométricas* July 12, 2011
 Cuartas Jornadas de Teoría de Números, July 11 – 15, 2011
 Bilbao, Spain
- The Dwork Family and Hypergeometric Functions (Poster)* February 25, 2011
 Women in Math Symposium, February 24 – 26, 2011
 IPAM, Los Angeles, CA
- The Dwork Family and Hypergeometric Functions* January 8, 2011
 AMS Session on Number Theory III
 Joint Mathematics Meetings, January 6 – 9, 2011
 New Orleans, LA
- Rational Points and Hypergeometric Functions* April 23, 2010
 Workshop on Counting Points: Theory, Algorithms and Practice, April 19 – 23, 2010
 Centre de recherches mathématiques, Université de Montréal, Montréal, QC.
- Rational Points and Hypergeometric Functions* October 4, 2009
 Maine-Québec Number Theory Conference, October 3 – 4, 2009.
 University of Maine, Orono

OTHER RECENT CONFERENCES

- Joint Mathematics Meetings 2013
 San Diego, CA, January 9 – January 12, 2013.
- MathFest 2012
 Madison, WI, August 2 – August 4, 2012.
- Sage Days 42: Women in Sage 3
 Seattle, WA, July 15 – July 19, 2012.
- Workshop on Computational Algebra and Number Theory
 Workshop on Hypergeometric Motives
 Abdus Salam International Center for Theoretical Physics (ICTP), Trieste, Italy,
 June 18 – June 29, 2012.
- Legacy of R.L. Moore Conference 2012
 Austin, TX, June 14 – June 16, 2012.
- Georgia VIGRE Summer School on Algebraic Geometry
 University of Georgia, Athens, GA, May 28 – June 2, 2012.
- Complex and p -adic Dynamics

ICERM, Providence, RI, February 13 – 17, 2012.

Joint Mathematics Meetings 2012
Boston, MA, January 4–7, 2012.

REUF3 - Research Experiences for Undergraduate Faculty
AIM, Palo Alto, CA, July 18 – 22, 2011.

CAARMS 2011 – Conference for African American Researchers in the Mathematical Sciences
Los Angeles, CA, June 1 – 4, 2011.

SACNAS National Conference – Society for the Advancement of Chicano and Native American Scientists
Anaheim, CA, September 30 – October 3, 2010.

MathFest 2010
Pittsburgh, PA, August 5 – 7, 2010.

MAA PREP Workshop on Teaching Algebraic Number Theory to Undergraduates
Williams College, Williamstown, MA, June 27 – July 2, 2010.

Arizona Winter School 2010: Number Theory and Dynamics
University of Arizona, Tucson, AZ, March 13 – 17, 2010.

Joint Mathematics Meetings
San Francisco, CA, January 13 – 16, 2010.

MathFest 2009
Portland, Oregon, August 6 – 8 2009.

HONORS AND FELLOWSHIPS

Project NExT Fellow	August 2009 - August 2010
Certificate in Interdisciplinary First-year Teaching	December 2008
AAAS-AMS Mass Media Fellowship	June 2007 - August 2007

GRANTS

BIRS Focussed Research Group Grant (January 2013)

To organize a small workshop on “Effective Computations in Arithmetic Mirror Symmetry” at Banff, AB, to be held March 17–24, 2013.

AIM SQuaREs Grant (December 2012)

To organize a small workshop on “Effective Computations in Arithmetic Mirror Symmetry” at AIM in Palo Alto, CA, to be held June 16–20, 2014.

Bates Faculty Development Fund Grant (May 2012)

\$4357.60 to aid with pre-tenure leave research travel expenses, from May 2012 to June 2013.

AWM Mentoring Travel Grant (March 2012)

\$4600 to work with Leila Schneps in the Institut de Mathématiques de Jussieu in Paris, for October 2012.

Mellon Innovation Grant - Bates College (April 2011)

\$2000 from the Integrated Math/Science Curriculum Development fund to prepare an integrated Calculus (Math 105) and Physics (Phys 107) course along with John Smedley, during Short Term 2011. The course was taught in the Fall 2011 semester.

Mellon Innovation Grant - Bates College (October 2010)

\$3720 to attend the conferences SACNAS 2010 and CAARMS 2011, to network and recruit diverse applicants for future academic positions in the mathematics department.

SERVICE

At Bates

Math Department Hiring Committee 2012

Served on committee to hire a one-year visiting position.

WRBC Faculty Advisor January 2012 - Present

Mellon Math and Science Committee September 2011 - June 2012

Teaching Evaluation Committee September 2010 - June 2012

Math Council Co-organizer September 2009 - June 2012

Math Department Seminar Organizer September 2009 - May 2010

Outside Bates

Undergraduate presentations judge August 2 - 4, 2012
MathFest 2012.

Associate Editor January 2011 - Present
American Mathematical Monthly.

Editorial Board Member January 2011 - Present
MAA FOCUS Magazine

Undergraduate mentor September 30 – October 3, 2010
SACNAS National Conference

PROFESSIONAL
SOCIETIES

Member of the American Mathematical Society, the Mathematical Association of America, and the Association for Women in Mathematics.

PROGRAMMING
LANGUAGES

LaTeX, Pari-GP, html, Maple, Matlab, Sage, MAGMA, Mathematica.