

- Employment**
- **University of Arizona (UA)**
Ph.D. student (TA, RA, VIGRE Fellow, G-TEAMS Fellow), Math, 2006 - present
 - **Parts Depot**
Warehouse worker, 2000 - 2001
 - **Parts Central**
Office worker, 1997 - 2000
- Education**
- **University of Arizona** (2006 - present)
Ph.D. student, Mathematics
Advisor: William G. McCallum
 - **University of Tennessee** (2004 - 2006)
B.Sc. Summa Cum Laude, Mathematics (Honors), May 2006
 - **Pellissippi State Technical Community College** (2001 - 2003)
63 credits for transfer
- Grants and Awards**
- VIGRE fellowship, UA, Summer & Fall 2011, Spring 2012
 - Galileo Circle Scholarship, Spring 2011
 - G-TEAMS Fellowship, UA Fall 2010 - Spring 2011
 - Research Assistantship, UA, Fall 2009
 - Passed Comprehensive Examination on First Attempt, May 2009
 - VIGRE fellowship, UA, Spring 2009
 - VIGRE fellowship, UA, Summer & Fall 2008
 - Passed Qualifying Examinations on First Attempt, August 2007
 - VIGRE First-Summer Fellowship, Qual Prep, UA, Summer 2007
 - Teaching Assistantship, UA, Fall 2006
 - Chancellor's Honors, Academic Achievement and Professional Promise (Arts and Sciences, GPA: 4.0), University of Tennessee, 2006
 - Appalachian Scholar, Univ. of Tennessee, 2004-2006
 - NSF Grant via Honors Mathematics Program, University of Tennessee, 2004 - 2006
 - John H. Barrett Prize (Outstanding Senior Award), University of Tennessee, 2005-2006
 - Cooper D. Schmitt Scholarship, Univ. of Tennessee, 2004 - 2005
 - National Dean's List
 - University of Tennessee's Dean's List 2004-2006

- Pellissippi State's Dean's List
- 1st Place in 2002 - 2003 Math Bowl at Pellissippi State
- 1st Place in State TMATYC for Calculus I
- State recognition award, Duke Univ. Talent Identification Program

Publications

1. *Extending Ferrero's and Kida's Explicit Computations of Iwasawa λ -Invariants*, preprint.
2. *Various Riemann-Hurwitz Formulas for Iwasawa λ -Invariants in Cyclic p -Extensions*, in preparation.
3. *An Iwasawa Theoretic Castelnuovo-Severi Inequality*, on-going research.

Service

- Co-Organizer of the Graduate Student Colloquium (Fall 2011 - Spring 2012)
- Advisor for minority undergraduates in mathematics with Dr. William Vélez (Fall 2011 - Spring 2012)
- Co-Coordinator of Research Tutorial Group (RTG) project for second-year graduate students with Dr. William McCallum (Fall 2011)
- Volunteer assistant at the University of Arizona's annual Integration Workshop for incoming math graduate students (2007 - 2011)

Conferences and Workshops Attended ...

- *2012 Joint Mathematics Meetings*, AMS supported, Boston, MA, January 2012
- *Southern California Number Theory Day*, NSF supported, Irvine, CA, October 2011
- *Workshop on Iwasawa Theory*, NSF supported, Tucson, AZ, October 2011
- *Annual Meeting for GK-12 Project Teams*, NSF, Washington, DC, March 2011
- *4th Annual GK-12 Showcase*, G-TEAMS, HEATWAVES, and BioME, UA, February, 2011
- *7th Annual Mathematics Educator Appreciation Day (MEAD) Conference*, Center for Recruitment and Retention of Mathematics Teachers, Tucson High School, January 2011

- *Institute for Transformative Education*, Tucson Unified School District - Mexican American Studies Department and the College of Education, UA July 2010
- *Iwasawa 2010 Conference*, Fields Institute, University of Toronto, Toronto, ON, Canada, July 2010
- *G-TEAMS Summer Institute*, Institute for Mathematics and Education, UA, June 2010
- *Mathematicians in Mathematics Education*, Institute for Mathematics and Education, UA, April 2010
- *Quadratic Forms*, Arizona Winter School (AWS), March 2009
- Integration Workshop, Assistant, UA, August 2008
- *Special Functions and Transcendence*, AWS, March 2008
- RTG mini-conference, UA, December 2007
- Integration Workshop, Assistant, UA, August 2007
- Integration Workshop, Participant, UA, August 2006
- Recruitment Workshop, Participant, UA, March 2006

Teaching

University of Arizona

- *G-TEAMS Fellow*, Summer 2010-Spring 2011, Statistics, AP Calculus, and PreCalculus at Rincon High
- *Super TA*, Fall 2009-Spring 2010, Math 511A-511B: Algebra
- *Instructor*, Fall 2009, Math 105: Math in Modern Society
- *Super TA*, Summer 2009, Math 511A-B: Algebra
- *Instructor*, Summer 2009, Math 215: Intro. to Linear Algebra
- *Super TA*, Fall 2008-Spring 2009, Math 511A-511B: Algebra
- *Super TA*, Summer 2008, Math 523A-B: Analysis
- *Instructor*, Spring 2008, Math 113: Elements of Calculus
- *Instructor*, Fall 2007, Math 120R: Calculus Preparation
- *Instructor*, Spring 2007, Math 110: College Algebra
- *Instructor*, Fall 2006, Math 110: College Algebra

Talks

Please visit <http://math.arizona.edu/~jschettler/#Research> to download slides and posters.

1. “Cyclic p -Extensions of \mathbb{Z}_p -Fields,” 2012 Joint Mathematics Meetings, Boston, MA, January 2012

2. “Congruences, Inequalities, and a Vanishing Criterion for Iwasawa λ -Invariants,” Arizona State University, Tempe, AZ, November 2011
3. “Riemann-Hurwitz Formulas in Iwasawa Theory”, Poster Presentation, Southern California Number Theory Day, UC Irvine, Irvine, CA, October 2011
4. “Analogies between Function Fields and Number Fields,” Student Algebraic Geometry Seminar, UA, October 2011
5. “A Brief Account of Ramanujan’s Life and Selected Results,” Graduate Student Colloquium, UA, September 2011
6. “Slumdog Millionaire,” Math Appreciation Day, Rincon High School, April 2011
7. “Elliptic Curves Over \mathbb{Q} ,” RTG lecture series, UA, April 2011
8. “Voting Systems, Mass Murder, and the Enigma Machine,” Math Appreciation Day, Rincon High School, March 2011
9. “Making Math Count in the Community: Measuring Income Disparity,” Annual Meeting for GK-12 Project Teams, Washington, DC, March 2011
10. “Smooth Manifolds and Minkowski Spacetime,” Math Appreciation Day, Rincon High School, March 2011
11. “The Brumer-Stark Conjecture,” Algebra and Number Theory Seminar, UA, February 2011
12. “Base 18, Quaternions, Markov Chains, and Absurdity,” Math Appreciation Day, Rincon High School, February 2011
13. “Hyperbolic Geometry, Complex Periods, Stereoscopy, and 4D,” Math Appreciation Day, Rincon High School, January 2011
14. “How to Mathematize the World: Black Holes, Oil Spills, the Spread of AIDS, ...,” MEAD Conference, Tucson High, January 2011
15. “Dalibraic Topology,” Graduate Student Colloquium, UA, October 2010
16. “Dynamics Over Number Fields,” Algebra and Number Theory Seminar, UA, February 2010
17. “Iwasawa Theory of Elliptic Curves and BSD in Rank Zero (Parts I & II),” Algebra and Number Theory Seminar, UA, October 2009

18. “Riemann-Hurwitz Formulae for Number Fields,” Oral Comprehensive Exam, UA, May 2009
19. “A Riemann-Hurwitz Formula for Number Fields,” Algebra and Number Theory Seminar, UA, November 2008
20. “The Lower Algebraic K -Groups,” Graduate Student Colloquium, UA, September 2008
21. “On Bernoulli Numbers,” RTG mini-conference, UA, Dec. 2007
22. “Brauer’s Theorems and the Meromorphicity of L -functions,” Algebra and Number Theory Seminar, UA, October 2007
23. “Artin L -functions,” Grad. Student Colloquium, UA, March 2007
24. “Lehmer’s Totient Problem and Carmichael Numbers in a PID (Parts I & II),” Undergraduate Honors Seminar, University of Tennessee, November 2005

Languages

Spoken

- English (fluent)
- German (fair)

Computer

- Typesetting: \LaTeX
- Websites: HTML
- Alg./Num. Theory: Sage/Pari, GAP
- Gen. Math.: MATLAB, Maple, Fortran 90/95