

Curriculum Vitae

Jordan Schettler

Appointments

- **University of California, Santa Barbara** (Summer 2012 – Present)
Visiting Assistant Professor, Department of Mathematics
- **University of Arizona** (Fall 2006 – Spring 2012)
TA/RA, VIGRE/G-TEAMS Fellow, Department of Mathematics

Education

- **University of Arizona** (Fall 2006 – Spring 2012)
Ph.D., Mathematics, May 2012
Advisor: William G. McCallum
- **University of Tennessee** (Spring 2004 – Spring 2006)
B.Sc. Summa Cum Laude, Honors Mathematics, May 2006
Senior Thesis Advisor: Pavlos Tzermias

Publications

6. *Rational Hyperbolic Triangles and Elliptic Curves* (with Nicolas Brody), in revision, [arXiv link](#)
5. *Computing Iwasawa λ -Invariants of Imaginary Quadratic Fields with Continued Fractions*, to appear in *Journal of Numbers*, [arXiv link](#)
4. *Wendy's Xenharmonic Keyboard*, submitted to *Mathematics Magazine* (MAA), [pdf link](#)
3. *Generalizations of Iwasawa's 'Riemann-Hurwitz' Formula for Cyclic p -Extensions of Number Fields*, *International Journal of Number Theory*, **10** (2014), 219–233, [arXiv link](#)
2. *An Alternative Proof and Generalization of Ferrero's Computations of Iwasawa λ -Invariants*, *Journal of Number Theory*, **138** (2014), 84–96, [arXiv link](#)

1. *The Change in Lambda Invariants for Cyclic p -Extensions of \mathbb{Z}_p -Fields*, Ph.D. Thesis, University of Arizona, ProQuest Dissertation Publishing, May 2012, pdf link

Grants/Awards

- Mochizuki Memorial Fund Award (Outstanding Achievement in Math. Instruction)
UC Santa Barbara, Spring 2014
- AMS Simons Travel Grant for PostDocs
UC Santa Barbara, Spring 2013 – Spring 2015
- FRAP Grant (Faculty Research Assistance Program)
UC Santa Barbara, Winter 2013
- VIGRE fellowship
University of Arizona, Summer 2011 – Spring 2012
- Galileo Circle Scholarship
University of Arizona's College of Science, Spring 2011
- G-TEAMS Fellowship (Graduate STEM Fellows in K-12 Education)
University of Arizona, Fall 2010 – Spring 2011
- Research Assistantship with Professor Dinesh Thakur
University of Arizona, Fall 2009
- VIGRE fellowship
University of Arizona, Sum. 2007 & Sum. 2008 – Spring 2009
- Chancellor's "Academic Achievement & Professional Promise" (Arts & Sciences)
University of Tennessee, 2006
- NSF Scholarship "Appalachian Scholars in Computer Science and Mathematics"
University of Tennessee, 2004 – 2006
- John H. Barrett Prize (Outstanding Senior Award)
University of Tennessee, 2005 – 2006
- Cooper D. Schmitt Scholarship
University of Tennessee, 2004 – 2005

Service

- Organizer, *UCSB Number Theory Seminar*, UC Santa Barbara, Fall 2012 – Fall 2013, Fall 2014 – Present
- Organizer, *Graduate Student Colloquium*, University of Arizona, Fall 2011 – Spring 2012

- Volunteer, Advisor for minority undergraduates in mathematics with Dr. William Vélez at the University of Arizona (Fall 2011 – Spring 2012)
- Volunteer, Assistant at the University of Arizona Mathematics Department's annual Integration and Recruitment Workshops for incoming math graduate students (2007 – 2011)

Selected Talks

Use the research tab of my website math.ucsb.edu/~jcs/ to download slides/posters.

- *Rational Hyperbolic Triangles and Elliptic Curves*
Graduate Student Colloquium, UC Santa Barbara, February 2014
- *Class Numbers, Continued Fractions, and the Hilbert Modular Group*
Number Theory Seminar, UC Santa Barbara, November 2013
- *Λ -adic Modular Forms and Hida's Theorem (Parts 1 and 2)*
Number Theory Seminar, UC Santa Barbara, April 2013
- *A Brief Biography of Paul Erdős*
Introduction to Number Theory, UC Santa Barbara, March 2013
- *Theory of Classical Modular Forms and Symbols (Parts 1 and 2)*
Number Theory Seminar, UC Santa Barbara, February 2013
- *The Role of Continued Fractions in Rediscovering a Xenharmonic Tuning*
Graduate Student Colloquium, UC Santa Barbara, October 2012
- *Zeta Zeros and Quantum Energy Levels (with Yaron Hadad)*
Graduate Student Colloquium, University of Arizona, May 2012
- *Cyclic p -Extensions of \mathbb{Z}_p -Fields*
Joint Mathematics Meetings, Boston, MA, January 2012
- *Congruences, Inequalities, and a Vanishing Criterion for Iwasawa λ -Invariants*
Number Theory Seminar, Arizona State University, November 2011
- *Riemann-Hurwitz Formulas in Iwasawa Theory*
Poster Presentation, So. Cal. Number Theory Day, UC Irvine, October 2011
- *Analogies between Function Fields and Number Fields*
Student Algebraic Geometry Seminar, University of Arizona, October 2011
- *Voting Systems, Mass Murder, and the Enigma Machine*
Math Appreciation Day, Rincon HS, Tucson, AZ, March 2011
- *Making Math Count in the Community: Measuring Income Disparity*
Annual Meeting for GK-12 Project Teams, Washington, DC, March 2011
- *Smooth Manifolds and Minkowski Spacetime*
Math Appreciation Day, Rincon High School, March 2011

- *The Brumer-Stark Conjecture*
Algebra and Number Theory Seminar, University of Arizona, February 2011
- *Base 18, Quaternions, Markov Chains, and Absurdity*
Math Appreciation Day, Rincon High School, February 2011
- *Hyperbolic Geometry, Complex Periods, Stereoscopy, and 4D*
Math Appreciation Day, Rincon High School, January 2011
- *How to Mathematize the World: Black Holes, Oil Spills, the Spread of AIDS, ...*
MEAD Conference, Tucson HS, Tucson, AZ, January 2011
- *Dalibraic Topology*
Graduate Student Colloquium, University of Arizona, October 2010
- *Dynamics Over Number Fields*
Algebra and Number Theory Seminar, University of Arizona, February 2010
- *Iwasawa Theory of Elliptic Curves and BSD in Rank Zero (Parts I & II)*
Algebra and Number Theory Seminar, University of Arizona, October 2009
- *The Lower Algebraic K-Groups*
Graduate Student Colloquium, University of Arizona, September 2008
- *On Bernoulli Numbers*
Research Tutorial Group mini-conference, University of Arizona, December 2007
- *Brauer's Theorems and the Meromorphicity of L-functions*
Algebra and Number Theory Seminar, University of Arizona, October 2007
- *Lehmer's Totient Problem and Carmichael Numbers in a PID (Parts 1 and 2)*
Undergraduate Honors Seminar, University of Tennessee, November 2005

Teaching

Winter 2015	<i>Introduction to Number Theory A</i>	Instructor	UC Santa Barbara
Winter 2015	<i>Vector Calculus with App.s A</i>	Instructor	UC Santa Barbara
Spring 2014	<i>Transition to Higher Mathematics</i>	Instructor	UC Santa Barbara
Spring 2014	<i>Vector Calculus with App.s B</i>	Instructor	UC Santa Barbara
Winter 2014	<i>Introduction to Number Theory B</i>	Instructor	UC Santa Barbara
Fall 2013	<i>Introduction to Number Theory A</i>	Instructor	UC Santa Barbara
Sum. 2013	<i>Calculus and Applications</i>	Instructor	UC Santa Barbara
Spring 2013	<i>Introduction to Number Theory B</i>	Instructor	UC Santa Barbara
Winter 2013	<i>Introduction to Number Theory A</i>	Instructor	UC Santa Barbara
Winter 2013	<i>Vector Calculus with App.s B</i>	Instructor	UC Santa Barbara
Fall 2012	<i>Calc. for Social & Life Sciences</i>	Instructor	UC Santa Barbara
2010 – 2011	<i>Statistics, AP Calc., PreCalc.</i>	GK-12	Rincon HS
2009 – 2010	<i>Graduate Algebra A/B</i>	TA	Univ. of Arizona
Fall 2009	<i>Math in Modern Society</i>	Instructor	Univ. of Arizona
Sum. 2009	<i>Introduction to Linear Algebra</i>	Instructor	Univ. of Arizona

2008 – 2009	<i>Graduate Algebra A/B</i>	TA	Univ. of Arizona
Sum. 2008	<i>Graduate Analysis</i>	TA	Univ. of Arizona
Spring 2008	<i>Elements of Calculus</i>	Instructor	Univ. of Arizona
Fall 2007	<i>Calculus Preparation</i>	Instructor	Univ. of Arizona
Spring 2007	<i>College Algebra</i>	Instructor	Univ. of Arizona
Fall 2006	<i>College Algebra</i>	Instructor	Univ. of Arizona

Students Advised

- Jason Murphy, UC Santa Barbara's College of Creative Studies, Senior Thesis (Topic: complex multiplication and K3 surfaces), Expected Spring 2015
- Hripsime Iskandaryan, UC Santa Barbara's College of Creative Studies, Senior Thesis (Topic: applying the circle method to figurate numbers), Expected Spring 2015
- Nicolas Brody, UC Santa Barbara's College of Creative Studies, Senior Thesis (Topic: rational points on elliptic curves), Spring 2014
- *Ramanujan's Continued Fractions and the Icosahedron*, FRAP (Faculty Research Assistance Program): Carolina Arreola, Nic Brody, Hripsime Iskandaryan, Adam Schnee, and Yingying Wang, UC Santa Barbara, Winter/Spring 2013
- *Heron Triangles and Elliptic Curves*, Research Tutorial Group (RTG) project for 2nd-year grad students with Dr. William McCallum: Leo Maloney, A. Tao, Ronnie S. Williams, Fall 2011