# Travis Scholl

University of California Irvine Department of Mathematics Irvine, CA 92697, USA schollt@uci.edu

https://tscholl2.github.io/website/

U.S. Citizen

Last Updated: June 4, 2019

#### ACADEMIC EMPLOYMENT

2018 – (cur.) Visiting Assistant Professor, University of California, Irvine

2018 – 2018 Lecturer, University of Washington

## **EDUCATION**

2018 Ph.D. Mathematics, University of Washington (advisor: Neal Koblitz)

2013 B.S. Mathematics, University of Oregon

# RESEARCH INTERESTS

- Computational number theory
- Elliptic curve cryptography

#### **PUBLICATIONS**

- 1. T. Scholl. Super-Isolated Abelian Varieties. Submitted September 2018. Available at https://arxiv.org/abs/1809.03649.
- 2. T. Scholl. Abelian Varieties with Small Isogeny Class and Applications to Cryptography. PhD Thesis, University of Washington. Published online July 2018. Available at http://hdl.handle.net/1773/42458.
- 3. T. Scholl. Super-Isolated Elliptic Curves and Abelian Surfaces in Cryptography. *Experimental Mathematics*. Published online January 2018. Available at https://doi.org/10.1080/10586458.2017.1412371.
- 4. T. Scholl. Isolated elliptic curves and the MOV attack. *Journal of Mathematical Cryptology*, 11(3):131–146, 2017. DOI: https://doi.org/10.1515/jmc-2016-0053.

#### AWARDS AND GRANTS

- 2019 eTech Mini Grant, University of California, Irvine
- 2018 Best Poster, Algebraic Number Theory Symposium XIII
- 2017 Kazanci Fellowship, University of Washington
- 2014 Academic Excellence Award, University of Washington
- 2013 ARCS Fellowship, University of Washington
- 2013 Academic Merit Award, University of Washington

Travis Scholl 2

# 2012 DeCou Scholarship, University of Oregon

# RESEARCH TALKS

2019	May.	Number Theory Seminar, University of Maryland
2019	Mar.	AMS Special Session on Arithmetic Geometry, University of Hawai'i at Manoa

AMS Special Session on Cryptography, University of Hawai'i at Manoa 2019 Mar.

2018 Oct. Number Theory Seminar, University of California Los Angeles

2018 Oct. Number Theory Seminar, University of California Irvine

2018 Oct. Cryptography Seminar, University of California Irvine

2018 Jun. Communicating Mathematics Effectively, University of Oregon

2018 Feb. Computer Science Theory Seminar, University of Pennsylvania

2018 Feb. Colloquium, Center for Communications Research Princeton

2017 Oregon Number Theory Days, University of Oregon Oct.

2017 May. Number Theory Seminar, University of Washington

### **TEACHING**

### University of California Irvine

Math 199C: Independent Study (Number Theory)

Spring 2019

Math 120B: Ring Theory

Spring 2019

Math 173B: Cryptography

Winter 2019

Math 3A: Linear Algebra, Instructor

Winter 2019

Math 2E: Multivariable Calculus, Instructor

Fall 2018

#### University of Washington

Math 308: Matrix Algebra with Applications, Instructor

Spring 2018

Math 124: Calculus I, Teaching Assistant

Winter 2014

Math 125: Calculus II, Teaching Assistant

Fall 2013, Spring 2014, Fall 2014, Winter 2014, Spring 2015, Fall 2015, Winter 2016, Spring 2016, Winter 2017, Fall 2017, Winter 2018

Math 126: Calculus III, Teaching Assistant

Fall 2016

Math 125: Calculus II, Instructor

Summer 2014, Summer 2015, Summer 2016, Summer 2017, Summer 2018

Math 510A: Preliminary Exam Preparation for Graduate Students, Instructor Summer 2015, Summer 2016

Travis Scholl 3

#### SEMINARS ORGANIZED Cryptographic Multilinear Maps, University of California Irvine 2018 - cur.CONFERENCES ATTENDED 2019 Mar. AMS Sectional Meeting, Honolulu, HI 2019 Jan. Joint Math Meetings, Baltimore, MD 2018 Sep. Open Questions in Cryptography and Number Theory, Irvine, CA 2018 Aug. MAA MathFest, Denver, CO 2018 Jul. Algorithmic Number Theory Symposium XIII, Madison, WI 2018 Communicating Mathematics Effectively, Seattle, WA Jun. 2018 PNW MAA Section Meeting, Seattle, WA Apr. 2018 Joint Math Meetings, San Diego, CA Jan. 2017 Oregon Number Theory Days, Eugene, OR Oct. June SaTC Workshop on Privacy and Security, Madison, WI 2016 2016 Mar. Arizona Winter School, Analytic Methods in Arithmetic Geometry, Tucson, AZ 2016 Jan. Joint Mathematics Meetings, Seattle, WA 2015 Oct. Western Algebraic Geometry Symposium, Seattle, WA 2015 Sage Days 68, Bellingham, WA Aug. 2015 May. Sage Days 64.25, Encinitas, CA Mar. Arizona Winter School, Rational Points on Surfaces, Tucson, AZ 2015 OUTREACH 2019 – 2019 Math Circle Leader, University California, Irvine, Irvine CA 2018 – 2018 Tutor, Ada Developers Academy, Seattle WA 2015 – 2018 Member, Association for Women in Mathematics, University of Washington Chapter 2016 – 2018 Mentor, Washington Experimental Mathematics Lab, University of Washington 2015 – 2018 Sage Workshop Leader, Math Day, University of Washington 2015 - 2017Volunteer, Julia Robinson Math Festival, University of Washington 2016 - 2016Mentor, Google Summer of Code, University of Washington OTHER EMPLOYMENT 2018 - 2018 Software Engineer, www.cocalc.com 2015 – 2017 Web Developer, University of Washington 2015 – 2016 Contract Web Designer, Virginia Tech 2013 – 2014 Contract Web Designer, San Diego

# OTHER SKILLS

2012 – 2013 Math Librarian, University of Oregon

- I contribute to the free and open source computer algebra system Sage, and reguarly use Sage in my research.
- I have written tens of thousands of lines of code in Go, Javascript, and Python and built several web applications, including an online math homework system.