Travis Scholl

University of California Irvine
Department of Mathematics
Irvine, CA 92697, USA

`traviswscholl@gmail.com`
`https://tscholl2.github.io/website/`
U.S. Citizen
Last Updated: January 17, 2020

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

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 Mānoa
2019	Mar.	AMS Special Session on Cryptography, University of Hawai'i at Mānoa
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	Oct.	Oregon Number Theory Days, University of Oregon
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

Seminars Organized

2018 – cur.   *Cryptographic Multilinear Maps*, University of California Irvine

Working Groups

2019   Jun.   *Invited working group participant, Microsoft Research. Hosted by Kristin Lauter and the Cryptography Research Group*

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   Jun.   *Communicating Mathematics Effectively*, Seattle, WA
2018   Apr.   *PNW MAA Section Meeting*, Seattle, WA
2018   Jan.   *Joint Math Meetings*, San Diego, CA
2017   Oct.   *Oregon Number Theory Days*, Eugene, OR
2016   June   *SaTC Workshop on Privacy and Security*, Madison, WI
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   Aug.   *Sage Days 68*, Bellingham, WA
2015   May.   *Sage Days 64.25*, Encinitas, CA
2015   Mar.   *Arizona Winter School, Rational Points on Surfaces*, Tucson, AZ

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 – 2017   Volunteer, Julia Robinson Math Festival, University of Washington
2016 – 2016   Mentor, 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
2012 – 2013   Math Librarian, University of Oregon

Other Skills

- 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.