# Anya Michaelsen

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#### Research Interests

algebraic number theory, arithmetic statistics

#### Education

2019–present University of California Berkeley, Ph.D. in Mathematics.

2015–2019 Williams College, B.A. in Mathematics.

#### Research

- 2018–2019 Undergraduate Thesis, Uncountable Noetherian Rings with Unusual Prime Ideal Structures, Advisor: Susan Loepp, Williams College [1].
  - 2018 **SMALL REU**, Uncountable Excellent Rings with Countable Spectra, Advisor: Susan Loepp, Williams College.
  - 2017 **Emory REU**, Lacunary Eta-Quotients Modulo Powers of Primes, Advisor: Ken Ono, Emory University [2].
- 2013-2015 **Independent Research**, Kinematic Determinants of Success in the Fencing Flick, Advisor: Corey Cleland, James Madison University [3].

## Teaching

Fall 2020 Graduate Student Instructor, UC Berkeley.

Math 1B - Calculus. Instructor: Alexander Paulin

Summer iD Tech Camp Instructor.

- 2019 Courses: Java Coding for Minecraft, Scratch Game Design
- 2016-2019 Teaching Assistant, Williams College.

Courses: Abstract Algebra, Number Theory, Discrete Mathematics

Fall 2017 iTeam Instructor.

Teaching coding in Scratch at local elementary schools.

#### Talks and Presentations

Spring 2021 Finding Patterns: The Mathematics of Set the Game.

Many Cheerful Facts Seminar, UC Berkeley

Fall 2019 Bertini Theorems over Finite Fields.

Student Arithmetic Geometry Seminar, UC Berkeley

 ${\bf Spring}\ 2019\quad {\it Uncountable}\ {\it Excellent}\ {\it Rings}\ {\it with}\ {\it Countably}\ {\it Many}\ {\it Prime}\ {\it Ideals}.$ 

Undergraduate Thesis Defense, Williams College

#### Awards and Honors

- 2021 Nullstellenfont [4] appearing in The Best Writing in Mathematics (2020)
- 2019 NSF Graduate Research Fellowship

Chancellor's Graduate Fellowship (UC Berkeley)

Rosenberg Prize (Williams College)

- 2018 MAA MathFest Outstanding Presentation Award Barry Goldwater Honorable Mention
- 2017 Clare Boothe Luce Scholarship (Luce Foundation)
   Erastuc C. Benedict Prize (Williams College)
   Barry Goldwater Honorable Mention

## Conferences/Workshops

- 2021 Arizona Winter Semester
- 2020 Connecticut Summer School in Number Theory
- 2020 Arizona Winter School
- 2019 Joint Math Meetings (talk)
- 2018 Joint Math Meetings (talk)

  MAA MathFest (poster)

  Nebraska Conference for Undergraduate Women in Math
- 2017 Grace Hopper Celebration of Women in Computing Graduate Research Opportunities for Women (GROW)

### Service

- 2021 Graduate Assembly Department Climate Advocate, UC Berkeley.
- 2020 2021 Equity & Inclusion Committee, UC Berkeley.
  - 2019-2021 Noetherian Ring (NRing) Organizer, UC Berkeley.
- 2019–2021 Mathematics Graduate Students Association (MGSA), UC Berkeley.
- 2019-2020 Unbounded Representation (URep), UC Berkeley.
- 2016-2019 Student Math and Stat Advisory Board (SMASAB), Williams College.
- 2016-2019 Association for Women in Math Chapter, Williams College.

#### Publications

- [1] S. Loepp and A. Michaelsen. *Uncountable n-dimensional Excellent Regular Local Rings with Countable Spectra*. Trans Amer. Math. Soc. **373** (2020) pp.479-490.
- [2] Cotron, T., Michaelsen, A., Stamm, E. et al. Lacunary eta-quotients modulo powers of primes. Ramanujan J (2020). https://doi.org/10.1007/s11139-020-00257-y
- [3] Michaelsen AN, Cleland CL (2019) Kinematic determinants of scoring success in the fencing flick: Logistic and linear multiple regression analysis. PLoS ONE 14(9): e0222075. https://doi.org/10.1371/journal.pone.0222075

## Other Writing

- [4] Ben Logsdon, Anya Michaelsen & Ralph Morrison (2020) Nullstellenfont, Math Horizons, 27:4, 5-7, DOI: 10.1080/10724117.2020.1714365
- [5] Anya Michaelsen. Design and Construction of Mathematical Posters. Notices of the American Mathematical Society. 66.2 (2020): 189-191.

Updated: March 5, 2021