# John Clark

Curriculum Vitae

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	Education
2021–Present	PH.D. in Mathematics, University of Texas at Austin, Austin, TX.
2020–2021	PH.D. in Mathematics, Oklahoma State University, Stillwater, OK.
2018–2020	Master of Science in Mathematics, Oklahoma State University, Stillwater, OK.
Thesis Title	Polynomials with Small Elliptic Mahler Measure Via Genetic Algorithms
Advisor	Dr Paul Fili
2012-2016	<b>Bachelor of Science in Mathematics</b> , <i>California Institute of Technology (Caltech)</i> , Pasadena, CA.
2010-2012	<b>Texas Academy of Mathematics and Science (TAMS) Program</b> , University of North Texas, Denton, TX.
	Publications
1.	Adaptive Network Modeling of Social Distancing Interventions (with C. Corcoran). Journal of Theoretical Biology, https://doi.org/10.1016/j.jtbi.2022.111151
	In Preparation
2.	Polynomials with small elliptic Mahler measure via genetic algorithms (with P. Fili).
	Research Experience
Summer 2022	<b>Pomona Research in Mathematics Experience (PRiME) Research Assistant</b> , <i>Pomona College, Goins Group</i> , Claremont, CA.
	Worked as a Research Assistant with Prof. Edray Goins, and 3 undergraduates on the research project "Monodromy Groups of Belyi Lattès Maps".
Summer 2020	<b>AIM-MCRN Summer School 2020 participant</b> , <i>Dynamics and data in the COVID-19 pandemic</i> .
	Worked with other early career mathematicians on data-driven models with an emphasis on adaptive network models related to the COVID-19 pandemic
Summer 2015	SURF participant, Caltech, Marcolli Group, Pasadena, CA.
	Worked with Farzad Fathizadeh in researching the relations between scalar curvature and characteristic in noncommutative two-tori when perturbed by Beltrami differentials.
Summer 2012	<b>Freshman Summer Research Institute participant</b> , <i>Caltech, Krishnan Group</i> , Pasadena, CA.
	Generated a regression analysis between earthquake source parameters and intensities of resulting ground motions in the Los Angeles Basin

### Selected Presentations

- October 2022 Elliptic Mahler Measure via Genetic Algorithms, AMS Special Session in Arithmetic Dynamics, University of Utah, UT.
  - March 2020 **The Family of Lattès Maps**, *Number Theory Seminar*, Oklahoma State University, OK.

## Honors & Fellowships

- 2021 Dean's Strategic Fellowship at UT Austin
- Spring 2020 Best Graduate Student Talk in Number Theory Seminar at Oklahoma State
- Fall 2019 The Honor Society of Phi Kappa Phi
- Spring 2019 O.H. Hamilton Award
- Spring 2019 E.K. McLachlan Memorial Scholarship
  - 2015-2016 Mellon Mays Undergraduate Fellowship
    - 2015 Caltech Summer Undergraduate Research Fellowship

## Service

- February Helped organize Math For All conference to foster diversity in the mathematical sciences with Addie Duncan at the University of Texas at Austin.
- April 2018 Ran a booth with Cynthia Franscisco and Nicole Boardman on cryptography for Oklahoma Mentor Day. Demonstrated shift ciphers, frequency analysis, and an Enigma machine on Pringles cans for elementary and middle school students.

#### Research Interests

Algebraic Geometry, Representation theory, mod p representations

#### Professional

- 2019-Present Member, American Mathematical Society
- 2019-Present Member, Mathematical Association of America