

Alicia Mae Lamarche *Curriculum Vitae*

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Employment

University of Utah	SALT LAKE CITY, UT
NSF Postdoctoral Fellow Grant #2103271	2021-current
Assistant Professor (Lecturer) Supported by NSF RTG Grant #1840190	2020-2021

Education

University of South Carolina	COLUMBIA, SC
Ph.D. in Mathematics <i>Advisor: Matthew Robert Ballard</i>	2015-2020
Shippensburg University of Pennsylvania	SHIPPENSBURG, PA
Bachelor of Science in Mathematics Minor in Computer Science	2013-2015

Research & Publications

In Preparation.

1. M. Ballard, A. Lamarche, On derived categories and rational points for a class of toric Fano varieties — *In Preparation*.

Submitted.

1. C. Hacon, A. Lamarche and K. Schwede, Global generation of test ideals in mixed characteristic and applications. (<https://arxiv.org/abs/2106.14329>) (2021)
2. M.R. Ballard, A. Duncan, A. Lamarche and P.K. McFaddin, Consequences of the existence of exceptional collections in arithmetic and rationality. (<https://arxiv.org/abs/2009.10175>) (2020)
3. S. Hashimoto, K. Honigs, A. Lamarche and I. Vogt, A transcendental Brauer-Manin obstruction to weak approximation on a Calabi-Yau threefold. (<https://arxiv.org/abs/2009.05862>) (2020)
4. M.R. Ballard, A. Duncan, A. Lamarche and P.K. McFaddin, Separable algebras and coflasque resolutions. (<https://arxiv.org/abs/2006.06876>) (2020)

Published.

1. K. Bresz, L. Jones, A. Lamarche and M. Markovich, A problem related to a conjecture of Polignac, *Integers* **16** (2016), Paper No. A43, 8 pp. MR3512873
2. J. Harrington, L. Jones and A. Lamarche, Characterizing finite groups using the sum of the orders of the elements, *Int. J. Comb.* **2014**, Art. ID 835125, 8 pp. MR3280890

3. J. Harrington, L. Jones and A. Lamarche, Representing integers as the sum of two squares in the ring \mathbb{Z}_n , *J. Integer Seq.* **17** (2014), no. 7, Article 14.7.4, 10 pp. MR3238121
4. L. Jones and A. Lamarche, Generating d -composite sandwich numbers, *Integers* **15A** (2015), Paper No. A10, 21 pp. MR3361819
5. L. Jones and A. Lamarche, The irreducibility of polynomials related to a question of Schur, *Involve* **9** (2016), no. 3, 453–464. MR3509338

Proceedings.

1. Yee, S.P., Deshler, J., Rogers, Papalia, N., & Lamarche, A., (February, 2020). Interpreting Undergraduate Student Complaints about Graduate Student Instructors through the Lens of the Instructional Practices Guide. Presented at the 23rd Annual Conference on Research in Undergraduate Mathematics Education (RUME, pp. TBD), Boston, MA. *Accepted*.

For more information on my research, please visit <http://alicialamarche.com/research/>.

Teaching Experience

University of Utah

- 1210 - Calculus 1

Fall 2020, Spring 2021

University of South Carolina

Instructor of Record

- 546 - Abstract Algebra
- 141 - Calculus 1
- 122 - Business Calculus
- 115 - Precalculus
- 111 - College Algebra

Summer 2019

Summer 2016, 2017

Spring 2017, 2018

Fall 2016

Fall 2017, 2019

Teaching Assistant

- 142 - Calculus 2
- 141 - Calculus 1

Fall 2015, Spring 2016

Fall 2018

Shippensburg University of Pennsylvania

- Mathematics peer tutor via the *University Learning Center*.
- Classroom Assistant for College Algebra and Linear Algebra

2013-2015

2013-2014

Awards & Grants

- NSF Postdoctoral Research Fellowship (Award #2103271) 2021- current
- Outstanding Dissertation Award @ UofSC 2020
- Dera D. Parkinson Graduate Fellowship 2019
- SPARC Graduate Research Grant @ UofSC 2018
- *Honorable Mention* - NSF Graduate Research Fellowship 2017
- James Eldon Award in Mathematics 2015
- Michael D. Seyfried Memorial Achievement Scholarship 2014-2015
- Shippensburg University Undergraduate Research Grant 2014-2015

Professional Activities

- Organizer, *Utah Algebraic Geometry Seminar* current
 - Directed Reading Program Mentor @ UofU 2020-2021
 - Graduate Student Instructor Peer Mentor Program (*Mentor*) 2019
NSF Award #1725295
 - Mathematics Tutoring Center Coordinator 2019
 - Graduate Student Instructor Peer Mentor Program (*Research Assistant*) 2018
NSF Award #1725295
 - Graduate Student Representative for the UofSC Math Graduate Council 2017-2018
 - Organizer, *Graduate Colloquium Series at UofSC* 2017-2018
http://people.math.sc.edu/alicial/grad_colloquium/
 - Organizer, *Graduate Student Seminar on Elliptic Curves* 2017
<http://people.math.sc.edu/alicial/seminars/curvesS17.html>
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Selected Seminar Talks

For information on work I've presented, please visit <http://alicialamarche.com/talks/>.

Recent/Future Conferences & Workshops

- *Derived Categories and (Non)commutative Algebraic Geometry*, December 7-8 2020. CMS Winter Meeting, Virtual.
- *Derived, Birational, and Categorical Algebraic Geometry*, November 1-6 2020. Virtual.
- *RNT: Rethinking Number Theory*, October 5-18 2020. Virtual.
- *Madison Moduli Weekend*, September 26-27 2020. Virtual.
- *Joint Mathematics Meetings*, January 15-18, 2020. Denver.
- *Interactions between Brauer Groups, Derived Categories and Birational Geometry of Projective Varieties*, November 10-15, 2019. BIRS.
- *FACETS of Algebraic Geometry*, October 18-20, Ann Arbor.
- *MSRI-NCTS Joint Summer School on Toric Varieties*, July 29-August 9, 2019. Taipei, Taiwan.
- *Mathematics Research Communities: Explicit Methods in Arithmetic Geometry in Characteristic p* , June 16-22, 2019.
- *Women in Homotopy Theory and Algebraic Geometry*, March 20-22, 2019. Freie Universität Berlin.
- *Introductory Workshop: Derived Algebraic Geometry and Birational Geometry and Moduli Spaces*, January 31-February 8, 2019. MSRI.
- *Connections for Women: Derived Algebraic Geometry and Birational Geometry and Moduli Spaces*, January 28-30, 2019. MSRI.
- *A Day of Algebraic Geometry in Savannah*, March 31, 2018. Georgia Southern.
- *The Georgia Algebraic Geometry Symposium*, February 23-25, 2018. Georgia Tech.

- *Graduate Workshop in Algebraic Geometry for Women and Mathematicians of Minority Genders*, February 17-18, 2018. Harvard/MIT.
- *Workshop on Topics in Algebraic Geometry*, November 3-5, 2017. UNC Chapel Hill.
- *The Georgia Algebraic Geometry Symposium*, March 3-5, 2017. University of Georgia
- *Workshop on Symplectic Varieties and Geometric Representation Theory*, October 28-30, 2016. UNC Chapel Hill.
- *UGA-SWAG: Georgia Summer Workshop in Algebraic Geometry*, August 26-29, 2016. University of Georgia.
- *Workshop on New Developments in Moduli and Geometric Invariant Theory*, November 20-22, 2015. UNC Chapel Hill.

Updated on January 24, 2022