

Jacqueline Anderson

Campus Address:
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 Mathematics Department
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Employment: **Bridgewater State University**, Bridgewater, MA
 Associate Professor of Mathematics, September 2019-present
 Assistant Professor of Mathematics, September 2013-September 2019

Education: **Brown University**, Providence, RI: Ph.D., Mathematics, May 2013
 Advisor: Joseph Silverman
 Thesis: p -adic analogues of the Mandelbrot set
Brown University, Providence, RI: M.Sc., Mathematics, May 2010
Providence College, Providence, RI: B.A., Mathematics, May 2008
 Minor: Computer Science

Teaching: Bridgewater State University, Fall 2013 – present
Courses taught: MATH 120: Introduction to Linear Algebra, MATH 140: Elements of Precalculus, MATH 141: Elements of Calculus I, MATH 150: Precalculus with Trigonometry, MATH 161: Single Variable Calculus I, MATH 162: Single-Variable Calculus II, MATH 199: First-Year Seminar: Math and Politics, MATH 261: Multivariable Calculus, MATH 287: Honors Colloquium, MATH 301: Abstract Algebra I, MATH 302: Abstract Algebra II, MATH 303: Number Theory, MATH 561: Topics in Number Theory
Undergraduate Research: Mentored 5 Honors theses and 2 summer research projects. Scheduled to mentor 2 additional summer research projects and 2 Honors theses in 2023.
 Brown University, Summer@Brown Instructor, Summers 2010-2013
 CEMA 0903—Number Theory: An Introduction to Higher Mathematics
 Brown University, Teaching Fellow, Fall 2010 – Spring 2013
Courses taught: MATH 0050 – Analytic Geometry and Calculus I, MATH 0060 – Analytic Geometry and Calculus II, MATH 0170 – Advanced Placement Calculus
 Brown University, Teaching Assistant, Fall 2009
 MATH 0090 – Introductory Calculus

Publications: 1. Jacqueline Anderson, Brian Camara, and John Pike (2021). Positional Voting and Doubly Stochastic Matrices. *The American Mathematical Monthly* vol. 128, no. 4, 337-351.
 2. Jacqueline Anderson (2021). Math and Politics: An Interdisciplinary First-Year Seminar. In J. Schaefer, J. Bowen, M. Kozek, P. Pierce (Eds.) *Mathematical Themes in a First-Year Seminar*. Mathematical Association of America, MAA Notes Issue 91, 113-122.
 3. Jacqueline Anderson, Michelle Manes, and Bella Tobin (2020). Cubic post-critically finite polynomials defined over \mathbb{Q} . In S. Galbraith (Ed.) *Proceedings of the Fourteenth Algorithmic Number Theory Symposium*. Open book series, vol. 4, no. 1, 23-38.

4. Jacqueline Anderson (2019). Frequent Feedback Through Google Forms. *PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies* vol. 29, no. 2, 124-137.
5. Jacqueline Anderson, Irene Bouw, Ozlem Ejder, Neslihan Girgin, Valentijn Karemaker, and Michelle Manes (2018). Dynamical Belyi Maps. *Women in Numbers Europe II*, AWMS vol. 11, 57-82.
6. Jacqueline Anderson, Spencer Hamblen, Bjorn Poonen, and Laura Walton (2018). Local Arboreal Representations. *International Mathematics Research Notices*, vol. 2018, no. 19, 5974-5994.
7. Jacqueline Anderson, Jennifer Balakrishnan, Kristin Lauter, Jennifer Park, and Bianca Viray (2013). Comparing arithmetic intersection formulas for denominators of Igusa class polynomials. *Women in Numbers 2: Research Direction in Number Theory*, Contemporary Mathematics, vol. 606, Amer. Math. Soc., Providence, RI, 65-82.
8. Jacqueline Anderson (2013). Bounds on the radius of the p -adic Mandelbrot set. *Acta Arithmetica*, vol. 158, no. 3, 253-269.

Preprints:

1. Jacqueline Anderson, Michelle Manes, and Bella Tobin (2021). Some applications of dynamical Belyi polynomials, accepted pending revisions. Preprint available at arXiv:2109.03339.

Research Talks and Presentations:

- Bridgewater State University Math Seminar, April 2023
- Women in Numbers 6, March 2023
- Joint Mathematics Meetings, January 2023
- Providence College Colloquium, March 2022
- Massachusetts Regional PKAL Meeting, June 2021
- Algorithmic Number Theory Symposium XIV, July 2020
- Bridgewater State University Math Seminar, December 2019
- Summer@ICERM, ICERM, June 2019
- AMS Sectional Meeting, University of Hawaii, March 2019
- AMS Eastern Sectional Meeting, Northeastern University, April 2018
- AMS Special Session, Joint Mathematics Meetings, January 2018
- Leading for Change Diversity Consortium, November 2017
- Joint Mathematics Meetings, January 2017 (2 presentations)
- Bridgewater State University Math Seminar, December 2016
- AIM Workshop: The Galois Theory of Orbits in Arithmetic Dynamics, May 2016
- Bridgewater State University Math Seminar, November 2015
- MAA Mathfest, August 2015
- Bridgewater-Stonehill-Wheaton Colloquium, November 2014
- Smith College Math Seminar, October 2014
- Bridgewater State University Math Seminar, March 2014
- AMS Special Session, Joint Mathematics Meetings, January 2014
- Ph.D. Thesis Defense, Brown University, April 2013
- UConn Algebra Seminar, February 2013
- Providence College Colloquium, February 2013

- University of Northern Colorado Colloquium, February 2013
- Southern New Hampshire University Colloquium, January 2013
- AWM Poster Session, Joint Mathematics Meetings, January 2013
- Five College Number Theory Seminar, Amherst College, October 2012
- Brown Algebra Seminar, October 2012
- Brown Graduate Student Seminar, September 2012
- ICERM Complex and p-adic Dynamics Poster Session, February 2012
- Women in Numbers 2, November 2011

Expository Talks:

- Bridgewater State University Abramson Colloquium, April 2018
- Massasoit Community College STEM Starter Academy, June 2016
- Providence College Pi Mu Epsilon Induction Ceremony, April 2013
- UConn Undergraduate Math Club, February 2013
- ICERM Postdoc/Graduate Student Seminar, February 2012
- MIT STAGE Seminar, March 2011
- Brown Graduate Student Seminar, September 2010
- Brown Graduate Student Seminar, February 2010
- Brown Arithmetic Seminar, December 2009

Awards and Grants:

- CARS Small Grant, BSU, 2022
- CARS Summer Grant, BSU, 2014, 2018
- AIM SQuaRE Grant, American Institute of Mathematics, 2017-2022
- Provost Scholars Research Grant, BSU, 2016-2017
- CARS and OTL Travel Grants (multiple) BSU, 2013-2023
- Daniel J. Smith Summer Research Grant, BSU, 2015
- Reginald D. Archambault Award for Teaching Excellence, honorable mention, 2012
- Brown Mathematics Department Teaching Award, 2012

Conferences and Workshops Attended:

- Women in Numbers 6, Banff, Alberta, Canada, March 2023
- Joint Mathematics Meetings, January 2023, 2021, 2018, 2017, 2016, 2014, 2013, 2012, 2011, 2009, 2008
- Massachusetts Regional PKAL Meeting, virtual, June 2021
- Math and Politics: Numeracy at the Ballot Box, virtual, May 2021
- Algorithmic Number Theory Symposium XIV, virtual, July 2020
- AIM SQuaRE Workshop, San Jose, CA, October 2019
- AMS Sectional Meeting, University of Hawaii, March 2019
- AMS Spring Sectional Meeting, Northeastern University, April 2018
- AIM SQuaRE Workshop, San Jose, CA, September 2017
- Geometry of Redistricting Workshop, Tufts University, August 2017
- Women in Numbers – Europe 2, Leiden, Netherlands, September 2016
- AIM Workshop: The Galois Theory of Orbits in Arithmetic Dynamics, May 2016

- RTG Workshop in Arithmetic Dynamics, University of Michigan, December 2015
- MAA Mathfest, August 2015
- Arithmetic 2015: Silvermania, August 2015
- AIM Workshop: Postcritically Finite Maps in Complex and Arithmetic Dynamics, March 2014
- MRC Complex Dynamics Workshop, June 2013
- AWM Workshop, Joint Mathematics Meetings, January 2013
- ICERM Semester Program – Complex and Arithmetic Dynamics, Spring 2012
- Women in Numbers 2, November 2011
- Maine/Quebec Number Theory Conference, October 2011
- VIGRE Summer School on Arithmetic Dynamics, May 2011
- MSRI Graduate Summer Workshop – Elliptic Curves, June 2010
- Summer Program for Women in Mathematics, GWU, Summer 2007

Leadership and Service:

- Mathematics Program Review Committee, BSU, 2022-2023
- Core Curriculum Steering Committee, BSU, 2021-present
- Peer Leader Program Coordinator, BSU, 2018-present (co-coordinator, 2016-2018)
- Mathematics Undergraduate Curriculum Committee, BSU, 2013-2019, 2021-present (Chair 2017-2019)
- Mathematics PRESS Committee (Pathways, Retention, and Equity Self-Study), 2020-present
- Joint Mathematics Meetings Special Session Organizer, 2023
- College of Science and Mathematics Equity Group, BSU, 2020-2022
- Mathematics Department Tenure Committee Representative, BSU, 2022-2023
- Mathematics Peer Evaluation Committee, BSU, 2020-2021 (chair 2021)
- Mathematics Community Events Committee, BSU, 2017-2022
- Referee, multiple journals (PRIMUS, Journal of the Australian Mathematical Society, Involve, La Mathematica), 2019-2023
- Interim Chair of Mathematics Department, BSU, Fall 2019
- BSU Undergraduate Curriculum Committee, 2017-2019
- CARS Advisory Board, BSU, 2016-2019
- Mathematics Graduate Committee, BSU, 2014-2018 (Chair 2015-2017)
- Mathematics Seminar Coordinator, BSU, 2013-2019
- AMS Spring Sectional Meeting Special Session Organizer, 2018
- Mentor for Female Student Success Mentoring Program, 2017-2018
- Women in STEM Learning Community Co-Advisor, BSU, 2016-2017
- HHMI Inclusive Excellence Grant Team, BSU, 2015-2017
- Graduate Dean Search Committee, BSU, 2017
- Developmental Math Working Group, BSU, 2015-2016
- Mathematics Faculty Search Committees, BSU, 2014, 2016
- Poster Session Judge, Joint Mathematics Meetings, 2016
- Math Club Co-Advisor, BSU, 2013-2014
- Pi Mu Epsilon Co-Advisor, BSU, 2013-2014
- Sheridan Center Teaching Consultant, Brown U., 2011-2013
- Sheridan Center Workshop Leader, Brown U., 2011-2013
- Graduate Student Seminar Coordinator, Brown U., 2009-2011

- Math Resource Center Tutor, Brown U., 2008-2011
- Computer Science Lab Assistant and Math Tutor, Providence College, 2006-2008

Training:

- Sheridan Center Teaching Certificate IV, Brown U., 2011
- Sheridan Center Teaching Certificate I, Brown U., 2010
- Mathematics Department Teaching Course, Brown U., 2009