CURRICULUM VITAE

Wade Hindes
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Professional preparation

Ph.D., Mathematics, Brown University	May, 2015.
B.S., Mathematics, University of Michigan	May, 2010.

Appointments

Associate Professor, Texas State University	Fall 2024 – Present.
Assistant Professor, Texas State University	Fall 2018 – Summer 2024.
Research Member (Complementary Program), MSRI	Spring 2022.
Postdoctoral Fellow, CUNY Graduate Center	Fall 2015 – Spring 2018.

Publications

[1] Wade Hindes, Peter Ye., et. al. On the proportion of irreducible polynomials in unicritically generated semigroups. *J. Algebra*, to appear. (arXiv:2308.14202)

[2] Jason P. Bell, Wade Hindes, and Xiao Zhong. Counting points by height in semigroup orbits. *Canad. J. Math.*, to appear. (arXiv:2305.04960)

[3] Wade Hindes. Dynamical diophantine approximation exponents in characteristic p. *Bull. London Math. Soc.*, 56.12 (2024): 3801-3818.

[4] Wade Hindes and Joseph H. Silverman. The size of semigroup orbits modulo primes. *Pacific J. Math.*, 325.2 (2023): 281-297.

[5] John Doyle, Vivian Healey, Wade Hindes, and Rafe Jones. Prime divisors in random quadratic sequences. *Math. Proc. Camb. Philos. Soc.*, 176.1 (2024): 95-122.

[6] Wade Hindes, Reiyah Jacobs, and Peter Ye. Irreducible polynomials in quadratic semigroups. *J. Number Theory*, 248 (2023): 208-241.

[7] Alexander Carney, Wade Hindes, and Thomas J. Tucker. Isotriviality, integral points, and primitive primes in orbits in characteristic p. *Algebra & Number Theory*, 17.9 (2023): 1573-1594.

[8] Wade Hindes. Counting points of bounded height in monoid orbits. *Math. Z.*, 301 (2022): 3395-3416.

[9] Wade Hindes. Orbit counting in polarized dynamical systems. *Disc. and Cont. Dynam. Syst., Ser. A*, 42.1 (2022): 189-210.

[10] Wade Hindes. Dynamical height growth: left, right, and total orbits. *Pacific J. Math.*, 311-2 (2021): 329-367.

[11] Wade Hindes. Dynamical and arithmetic degrees for random iterations of maps on projective space. *Math. Proc. Camb. Philos. Soc.*, (2021): 1-17.

[12] Wade Hindes, Rafe Jones, Michael Stoll, et. al. Eventually stable quadratic polynomials over $\mathbb{Q}$. *New York Journal Math.*, 26 (2020): 526-561.

[13] Wade Hindes and Rafe Jones. Riccati equations and polynomial dynamics over function fields. *Trans. Amer. Math. Soc.*, 373 (2020): 1555-1575.

[14] Vivian O. Healey and Wade Hindes. Stochastic canonical heights. *J. Number Theory*, 201 (2019): 228-256.

[15] Wade Hindes. Finite orbit points for sets of quadratic polynomials. *Int. J. Number Theory*, 15.8 (2019): 1693-1719.

[16] Wade Hindes. The average number of integral points in orbits. *Math. Res. Lett.*, 26.1 (2019): 101-120.

[17] Wade Hindes. Galois groups of some iterated polynomials over cyclotomic extensions. *Arch. Math. (Basel)*, 110.2 (2018): 109-113.

[18] Wade Hindes. Classifying Galois groups of small iterates via rational points. *Int. J. Number Theory*, 14.5 (2018): 1403-1426.

[19] Wade Hindes. Average Zsigmondy sets, dynamical Galois groups, and the Kodaira-Spencer map. *Trans. Amer. Math. Soc.*, 370.9 (2018): 6391-6410.

[20] Michael Bush, Wade Hindes, and Nicole Looper. Galois groups of iterates of some unicritical polynomials. *Acta Arith.*, 181 (2017): 57-73.

[21] Joseph Gunther and Wade Hindes. Integral points of bounded degree on the projective line and in dynamical orbits. *Proc. Amer. Math. Soc.*, 145.12 (2017): 5087-5096.

[22] Wade Hindes. Integrality estimates in orbits over function fields. *J. Number Theory*, 177 (2017): 1-19.

[23] Wade Hindes. Prime divisors in polynomial orbits over function fields. *Bull. London Math. Soc.,* 48.6 (2016): 1029-1036.

[24] Wade Hindes. The Vojta conjecture implies Galois rigidity in dynamical families. *Proc. Amer. Math. Soc.*, 144 (2016): 1931-1939.

[25] Wade Hindes. Galois uniformity in quadratic dynamics over rational function fields. *J. Number Theory*, 148 (2015): 372-383.

[26] Wade Hindes. Rational points on certain families of symmetric equations. *Int. J. Number Theory*, 11.6 (2015): 1821-1838.

[27] Wade Hindes. The Arithmetic of curves defined by iteration. *Acta Arith.*, 169 (2015): 1-27.

[28] Wade Hindes. Points on elliptic curves parametrizing dynamical Galois groups. *Acta Arith.,* 159 (2013): 149-167.

Papers under Review

[29] John Doyle and Wade Hindes. Unicritical polynomials over abc-fields: from uniform boundedness to dynamical Galois groups. Submitted. (`arXiv:2408.14657`)

Professional Awards

Departmental award for excellence in teaching, Texas State University, December, 2022.

Departmental award for excellence in research, Texas State University, December, 2019.

Departmental award for excellence in teaching, Brown University, May 2015.

Merit Prize and Jack McLaughlin Award in Algebra, University of Michigan, May 2010.

Grant Applications

Simons Foundation Collaboration Grant, January 2024, in preparation.

AMS-Simons Grant for Primarily Undergraduate Institutions, March 2023, not funded.

NSF Research Grant in Algebra and Number Theory, October 2022, not funded.

Simons Foundation Collaboration Grant, January 2022, not funded.

Simons Foundation Collaboration Grant, January 2021, not funded.

Sloan Foundation Fellowship, August 2020, not funded.

Texas State Research Enhancement Program (REP), January 2019, $8000.

Texas State Library New Faculty Startup Fund, April 2019, $1000.

Graduate Assistance in Areas of National Need (GAANN) Fellowship, September 2012.

Selected Talks, Conferences, and Workshops

Joint Mathematical Meetings (JMM), special session in arithmetic dynamics, Jan. 2025.

Oklahoma State University Number theory Seminar, July 2024.

Southern Regional Number Theory Conference, Louisiana State University, March 2024.

Number Theory at Duluth (GallianFest), University of Minnesota-Duluth, Aug. 2023.

Oklahoma State University Number Theory Seminar, Jan. 2023.

Joint Mathematical Meetings (JMM), special session in arithmetic dynamics, Jan. 2023.

AMS Western Sectional Meeting, special session in arithmetic dynamics, Oct. 2022.

Equidistribution and Arithmetic dynamics, Oklahoma State University, June 2022.

Seminar on the arithmetic of polynomial pairs, MSRI, Feb. - May 2022.

Connections Workshop: Complex Dynamics, MSRI, Feb. 2022.

Five College Number Theory Seminar, Amherst College, Oct. 2021.

Oklahoma State University Number Theory Seminar, May 2021.

University of Rochester Algebra and Number Theory Seminar, March 2021.

Joint Mathematical Meetings (JMM), special session in arithmetic dynamics, Jan. 2021.

Algebraic Dynamics and its Connections to Difference Equations, BIRS, Nov. 2020.

Arithmetic Dynamics International Online Seminar (ADIOS), July 2020.

Joint Mathematical Meetings (JMM), special session in arithmetic dynamics, Jan. 2020.

Algebra and Number Theory Seminar, Sabanci University, Istanbul, Nov. 2019.

Pacific Institute of Mathematics (Calgary), workshop in arithmetic dynamics, Aug. 2019.

Analytic and Combinatorial Number Theory, University of Illinois, June 2019.

Texas State Math Graduate Programs Expo, November 2018.

AMS Eastern Sectional Meeting, special session in arithmetic dynamics, April 2018.

Diophantine Analysis and Related Fields (DARF), Keio University, Tokyo, March 2018.

Colloquium, The Graduate Center of the City University of New York, March 2018.

Algebra Seminar, University of Connecticut, Nov. 2017.

Algebra Seminar, Bronx Community College (CUNY), Nov. 2017.

Upstate Number Theory Conference, Binghamton University, May 2017.

Undergraduate Seminar, Bowdoin College, Feb. 2017.

Undergraduate Seminar, Wake Forest University, Jan. 2017.

Junior Number Theory Days, Rutgers University, Nov. 2016.

Elliptic Curves and Modular Forms, University of Connecticut, Aug. 2016.

Joint Mathematical Meetings (JMM), special session in arithmetic dynamics, Jan. 2016.

RTG Workshop in Arithmetic Dynamics, University of Michigan, Dec. 2015.

Arithmetic 2015 in celebration of Joe Silverman, Brown University, Aug. 2015.

Collaborative Number Theory Seminar, CUNY, Nov. 2015.

Number Theory Seminar, MIT, Dec. 2014.

AMS Sectional, special session on Galois theory, Eau Claire WI, Sept. 2014.

NATO Advanced Study Institute on Hyperelliptic Curves, Macedonia, Aug. 2014.

AMS Sectional (Knoxville), special session on Curves, March 2014.

Algebra Seminar, Brown University, November 2013.

Committee Work

Math Department Hiring Committee, Texas State University, Oct. 2024 - Present.

Math Department Committee on Committees, Texas State University, May 2024 - Present.

Math Department Colloquium Committee, Texas State University, Aug. 2022 - May 2024.

Mathematics Graduate Programs Expo Planning Committee, June 2020 - Present.

Math Department Library Committee, Sept. 2018 - June 2020.

Organizer of CUNY-Columbia-NYU Number Theory Seminar, Aug. 2015 - Aug. 2018.

Outreach

Mathworks Summer Research Program, Summers of 2019, 2022, and 2023.

Faculty-Student STEM Communities, Texas State University, Jan. 2023 - Present.

“Once a First-Gen, Always a First-Gen", TXST Graduate College Panel, Nov. 2022.

Texas State Wakeboarding Team, Faculty Mentor, Jan. 2020 - Jan. 2021.

Bridge to Enter Advanced Mathematics (BEAM), tutor, 2017 - 2018.

Referee Work

International Math Research Notices
Transactions of the AMS
Mathematische Zeitschrift
Ergodic Theory and Dynamical Systems
Journal of Algebra
Compositio Mathematica
Proceedings of the AMS
Canadian Mathematical Bulletin
Illinois Journal of Mathematics
European Journal of Mathematics
Bulletin Australian Math Society
Journal of Number Theory
International Journal of Number Theory
Acta Arithmetica
Finite Fields and Their Applications
Discrete and Continuous Dynamical Systems Series A
Zentralblatt Math (zbMATH)
Math Reviews
Heliyon

Affiliations

Member of the American Mathematical Society.

Member of the Society for Advancement of Chicanos and Native Americans in Science

Certifications

The Sheridan Center for Teaching and Learning (Certicate I)

Program on Reflective Teaching Practices, Brown University, Fall 2012 - Spring 2013.