Matthew Satriano

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EMPLOYMENT

University of Waterloo, Associate Professor, 2020–present

On Paternity Leave, January–April 2021

University of Waterloo, Assistant Professor, 2015–20

Johns Hopkins University, Postdoctoral Researcher, 2014–15

University of Michigan, Postdoc Assistant Professor, 2010–14

EDUCATION

University of California at Berkeley, 2010

Ph.D. Mathematics
Stacky Resolutions of Singular Schemes
Advisor: Martin Olsson

Princeton University, 2005

B.A. Mathematics, *summa cum laude*

INTERESTS

Algebraic Geometry, Arithmetic Dynamics, Equivariant Geometry and Stack Theory

REFEREED PUBLICATIONS

Accepted or Published:[1]

1. David McKinnon and Matthew Satriano. Approximating rational points on toric varieties. *Transactions of the American Mathematical Society*, 374 (2021), no. 5, 3557–3577.

2. Jiahui Huang*, David McKinnon, and Matthew Satriano. What fraction of an S_n-orbit can lie on a hyperplane?. *Linear Algebra and Its Applications* 613 (2021), 1–23.

3. Jason P. Bell, Fei Hu**, Matthew Satriano. Height Gap Conjectures, D-Finiteness, and a Weak Dynamical Mordell–Lang Conjecture. *Mathematische Annalen*, 378 (2020), no. 3–4, 971–992.

4. Nguyen-Bac Dang**, Dragos Ghioca, Fei Hu**, John Lesieutre, and Matthew Satriano. Higher arithmetic degrees of dominant rational self-maps. *Annali della Scuola Normale Superiore di Pisa, Classe di Scienze*, (2020), 16 pages, accepted.

5. Wei Ho and Matthew Satriano. Galois closures of non-commutative rings and an application to Hermitian representations. *International Mathematics Research Notices*, Volume 2020, Issue 21, November 2020, 7944–7974.

6. Yoav Len** and Matthew Satriano. Lifting tropical self intersections. *Journal of Combinatorial Theory, Series A*, 170 (2020), 105138, 21 pp.

7. John Lesieutre** and Matthew Satriano. A rational map with infinitely many points of distinct arithmetic degrees. *Ergodic Theory and Dynamical Systems*, 40 (2020), no. 11, 3051–3055.

8. Dan Edidin and Matthew Satriano. Towards an Intersection Chow Cohomology Theory for GIT Quotients. *Transformation Groups*, 25 (2020), no. 4, 1103–1124.

9. Jenna Rajchgot, Matthew Satriano, and Wanchun Shen*. Some combinatorial cases of the three matrix analog of Gerstenhaber's theorem. Advances in Mathematical Sciences. Association for Women in Mathematics Series, vol 21. Springer, Cham. (2020).

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[1]Co-authors who were graduate or undergraduate students at the time a paper was written have been marked with (*) and Postdoctoral Fellows with (**).

10. Jason Bell, Dragos Ghioca, and Matthew Satriano. Dynamical Uniform Bounds for Fibers and a Gap Conjecture. *International Mathematics Research Notices*, (2019), 10 pages, accepted.

11. John Lesieutre** and Matthew Satriano. Canonical heights on hyper-Kähler varieties and the Kawaguchi-Silverman conjecture. *International Mathematics Research Notices*, (2019), 38 pages, accepted.

12. Dragos Ghioca and Matthew Satriano. Density of orbits of dominant regular self-maps of semiabelian varieties. *Transactions of the American Mathematical Society*, 371 (2019), no. 9, 6341–6358.

13. J. William Helton, Kyle P. Meyer*, Vern I. Paulsen, and Matthew Satriano. Algebras, Synchronous Games and Chromatic Numbers of Graphs. *New York Journal of Mathematics*, 25 (2019), 328–361.

14. Jenna Rajchgot and Matthew Satriano. New classes of examples satisfying the three matrix analog of Gerstenhaber's theorem. *Journal of Algebra*, 516 (2018), 245–270.

15. Dan Edidin and Matthew Satriano. Strong cycles and intersection products on good moduli spaces. *K-Theory – Proceedings of the International Colloquium, Mumbai, 2016*, 223–238, Hindustan Book Agency, New Delhi, 2018.

16. Anton Geraschenko and Matthew Satriano. A "Bottom Up" characterization of smooth Deligne–Mumford stacks. *International Mathematics Research Notices*, 2017, no. 21, 6469–6483.

17. Jason P. Bell, Dragos Ghioca, Zinovy Reichstein, and Matthew Satriano. On the Medvedev–Scanlon conjecture for minimal threefolds of non-negative Kodaira dimension. *New York Journal of Mathematics*, 23 (2017), 1185–1203.

18. Jason P. Bell, Matthew Satriano, and Susan J. Sierra, On a dynamical Mordell–Lang conjecture for coherent sheaves. *Journal of the London Mathematical Society*, 2017, (2) 96 (2017), no. 1, 28–46.

19. Matthew Satriano. When is a variety the quotient of a smooth variety by a finite group? *Oberwolfach Reports* 19 (2016), 992–996.

20. Benjamin Linowitz, Matthew Satriano, and Roope Vehkalahti. A non-commutative analogue of the Odlyzko bounds and bounds on performance for space-time lattice codes. *IEEE Trans. Inform. Theory*, 61 (2015), no. 4, 1971–1984.

21. Anton Geraschenko and Matthew Satriano. Torus quotients as global quotients by finite groups. *Journal of the London Mathematical Society* (2) 92 (2015), no. 3, 736–759.

22. Anton Geraschenko and Matthew Satriano. Toric stacks I: The theory of stacky fans. *Transactions of the American Mathematical Society*, 367 (2015), no. 2, 1033–1071.

23. Anton Geraschenko and Matthew Satriano. Toric Stacks II: Intrinsic characterization of toric stacks. *Transactions of the American Mathematical Society*, 367 (2015), no. 2, 1073–1094.

24. Manjul Bhargava and Matthew Satriano. On a notion of "Galois closure" for extensions of rings. *Journal of the European Mathematical Society*, 16 (2014), no. 9, 1881–1913.

25. Christian Liedtke and Matthew Satriano. On the birational nature of lifting. *Advances in Mathematics*, 254 (2014), 118–137.

26. Dan Abramovich, Qile Chen, Danny Gillam, Yuhao Huang, Martin Olsson, Matthew Satriano, and Shenghao Sun. Logarithmic Geometry and Moduli. *Handbook of moduli.* Vol. I, 1–61, Adv. Lect. Math. (ALM), 24, Int. Press, Somerville, MA, 2013.

27. Dan Edidin, Anton Geraschenko, and Matthew Satriano. There is no degree map for 0-cycles on Artin stacks. *Transformation Groups*, 18 (2013), no. 2, 385–389.

28. Qile Chen and Matthew Satriano. Chow quotients of toric varieties as moduli of stable log maps. *Algebra & Number Theory*, 7 (2013), no. 9, 2313–2329.

29. Matthew Satriano. Canonical Artin stacks over log smooth schemes. *Mathematische Zeitschrift* (2013), no. 3-4, 779–804

30. Matthew Satriano. de Rham theory for tame stacks and schemes with linearly reductive singularities. *Annales de l'Institut Fourier*, 62, No. 6, 2013–2051 (2012).

31. Matthew Satriano. The Chevalley-Shephard-Todd theorem for finite linearly reductive group schemes. *Algebra & Number Theory*, 6 (2012), no. 1, 1–26

Submitted:

32. David McKinnon, Rindra Razafy*, Matthew Satriano, and Yuxuan Sun*. On curves with high multiplicity on $\mathbb{P}(a, b, c)$ for $\min(a, b, c) \leq 4$. `https://arxiv.org/pdf/2011.10103.pdf`, (2020), 18 pages, submitted.

33. Dan Edidin, Matthew Satriano, and Spencer Whitehead*. An intrinsic characterization of cofree representations of reductive groups. `https://arxiv.org/pdf/1905.04845.pdf`, (2020), 26 pages, submitted.

34. Matthew Satriano and Jeremy Usatine**. Stringy invariants and toric Artin stacks. `https://arxiv.org/pdf/2009.04585.pdf`, (2020), 38 pages, submitted.

Mathematical Biology Publications:

35. Sherman TD*, Kagohara LT, Cao R, Cheng R, Satriano M, Considine M, et al. CancerInSilico: An R/Bioconductor package for combining mathematical and statistical modeling to simulate time course bulk and single cell gene expression data in cancer. *PLOS Computational Biology* (2019) 12 pages.

GRANTS	2015–22	NSERC Discovery Grant	$154,000
	2021–24	University of Waterloo Research Grant	$25,000
	2015–17	University of Waterloo Startup	$45,000
	2011–14	National Science Foundation MSPRF Grant	$108,000 USD

SELECTED AWARDS	2005	Top undergraduate thesis in mathematics at Princeton
		Phi Beta Kappa Highest GPA
	2004	Barry M. Goldwater Scholarship
		New Jersey Beta Chapter of Phi Beta Kappa
	2001	First Place Winner, Intel International Science and Engineering Fair
		Semi-Finalist, Intel Science Talent Search

INVITED CONFERENCE TALKS

Canadian Number Theory Association XVI, Toronto (June 2020), postponed due to COVID-19

Noncommutative Algebra and Noncommutative Geometry, Session of the Canadian Mathematical Society, University of Ottawa (June 2020), postponed due to COVID-19

Interpolating Between the Batyrev-Manin and Malle Conjectures, Canadian Western Algebraic Geometry Symposium, University of Saskatchewan (Mar. 2020)

New types of heights with connections to the Batyrev-Manin and Malle Conjectures, Arithmetic Dynamics, Special session of the American Mathematical Society, Denver, Colorado (Jan. 2020)

Lifting Tropical Self-Intersections, Convexity in Algebraic Geometry and Symplectic Geometry, Session of the Canadian Mathematical Society, University of British Columbia (Dec. 2019)

A counter-example to a finiteness conjecture of Kawaguchi and Silverman, Algebraic Geometry Session of the Canadian Mathematical Society, University of British Columbia (Dec. 2018)

Towards an Intersection Chow Cohomology Theory for GIT Quotients, Algebraic and Combinatorial Aspects of Tropical Geometry, Ohio State University (Mar. 2018)

On the Zhang–Amerik–Medvedev–Scanlon conjecture for threefolds of non-negative Kodaira dimension, Bridges between Noncommutative Algebra and Algebraic Geometry, Banff International Research Station (Sept. 2016)

When is a variety with quotient singularities a global quotient by a finite group?, Toric Geometry, Oberwolfach (Mar. 2016)

Is every variety with quotient singularities a global quotient by a finite group?, Equivariant Geometry and Algebraic Stacks, Australia National University (Mar. 2016)

Which varieties are quotients by finite groups?, New Trends in Toric Varieties, Special session of the American Mathematical Society, Eau Claire (Sept. 2014)

Toric Stacks and Applications to Cycle Theory, Algebraic Geometry days: A conference dedicated to the memory of Dan Laksov, Mittag–Leffler Institute (June 2014)

Stacky Resolutions, Algebraic Stacks: Progress and Prospects, Banff International Research Station (Mar. 2012)

Stacky Resolutions of Singular Schemes, Western Algebraic Geometry Symposium, Stanford University (Apr. 2011)

Stacky Resolutions and Applications, Special session on arithmetic, groups and geometry, American Mathematical Society Central Section meeting, Notre Dame (2010)

Invariant Theory and Canonical Artin Stacks, Equivariant algebraic geometry and related topics, University of California at Berkeley (2009)

OTHER INVITED CONFERENCES	Toric Geometry, Oberwolfach (Mar. 2022)
	Algebraic Dynamics and its Connections to Difference and Differential Equations, Banff International Research Station (Nov 2021)
	Algebraic Dynamics and its Connections to Difference and Differential Equations, Banff International Research Station (Nov 2020)
	Simons Symposium on Algebraic, Complex, and Arithmetic Dynamics, Schloss Elmau (May 2019)
	Beyond Toric Geometry, Casa Matemática Oaxaca (May 2017)
	Foundations of tropical schemes, American Institute of Mathematics (Apr. 2017)

INVITED SEMINAR TALKS	*An Introduction to Fantastacks*, Topics in Algebraic Geometry, Stanford University (May 2021)
	New types of heights with connections to the Batyrev-Manin and Malle Conjectures, Algebraic Geometry Seminar, UC Riverside (Mar 2021)
	New types of heights with connections to the Batyrev-Manin and Malle Conjectures, Algebra, Geometry, and Combinatorics Online Seminar (July 2020)
	On Height Gaps, D-finiteness, and a Weak Dynamical Mordell–Lang Conjecture, Arithmetic Dynamics International Online Seminar (May 2020)
	Characterizing Smoothness of Quotients, Colloquium, Georgia Institute of Technology (Feb. 2020)
	Characterizing Smoothness of Quotients, Colloquium, York University (Jan. 2020)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebra and Number Theory Seminar, Brown University (Nov. 2019)

On a GIT Characterization of Cofreeness, Institute for Basic Science, Center for Geometry and Physics, Pohang, Korea (Aug. 2019)

Cofreeness of representations, purity of the strictly semistable locus, and the periodic table, Algebraic Geometry Seminar, University of Arizona (Feb. 2019)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebra and Algebraic Geometry Seminar, University of Washington (Dec. 2018)

Towards an Intersection Chow Cohomology Theory with a Primer on Toric Stacks, Pre-talk for graduate students, University of Washington, (Dec. 2018)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebraic Geometry Seminar, Central Michigan University (Nov. 2018)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebra and Algebraic Geometry, University of British Columbia (Sept. 2018)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebra and Number Theory Seminar, Penn State University (Apr. 2018)

Interpolating Between the Batyrev–Manin and Malle Conjectures, Algebraic Geometry Seminar, Ohio State University (Dec. 2017)

The Medvedev–Scanlon Conjecture for Semiabelian Varieties and certain 3-folds, Algebra Seminar, University of Missouri (Oct. 2017)

Algebraic and quantum colorings of graphs, SUMRY Colloquium, Yale (Aug. 2017)

Stacky Resolutions, Invariant Theory, and Hodge Theory, Colloquium, University of Saskatchewan (Feb. 2017)

On the Medvedev–Scanlon Conjecture in dimension 3, Group, Lie and Number Theory Seminar, University of Michigan (Dec. 2016)

On the Medvedev–Scanlon Conjecture in dimension 3, Algebra and Number Theory Seminar, University of Maryland (Nov. 2016)

An Introduction to Toric Stacks, and Conjectures in Cycle Theory, Algebraic Geometry Seminar, University of British Columbia (Nov. 2016)

Stacky resolutions and applications, Colloquium, University of Western Ontario (Nov. 2016)

On the Medvedev–Scanlon Conjecture in dimension 3, Geometric Representation Theory Seminar, University of Toronto (Oct. 2016)

Toric Stacks and Applications, Geometric Structures Seminar, University of Toronto (Aug. 2015)

When is a variety a quotient of a smooth variety by a finite group?, Algebraic Geometry Seminar, University of Wisconsin (Nov. 2015)

Toric Stacks and Applications to Cycle Theory, Algebraic Geometry Seminar, Ohio State University (Nov. 2015)

Stacky Resolutions of Singularities, Colloquium, University of Waterloo (Feb. 2014)

Stacky Resolutions of Singularities, Colloquium, University of Missouri (Feb. 2014)

Stacky Resolutions of Singularities, Colloquium, University of Arizona (Jan. 2014)

Stacky Resolutions of Singularities, Colloquium, University of Notre Dame (Jan. 2014)

On the birational nature of lifting, Algebraic Geometry Seminar, University of Colorado at Boulder (Nov. 2013)

Stacky Resolutions of Singularities, Algebraic Geometry Seminar, University of Illinois at Urbana-Champaign (Oct. 2013)

A User's Guide to Stacks, Colloquium, University of Maryland (Feb. 2013)

On the birational nature of lifting, Algebra and Number Theory Seminar, University of Maryland (Feb. 2013)

Stacky Resolutions, Colloquium, Purdue University (Jan. 2013)

Toric Stacks with Applications to Cycle Theory, Algebraic Geometry Seminar, Stanford University (Nov. 2012)

Stacky Resolutions of Singular Schemes, Algebra and Number Theory Seminar, Emory University (Sept. 2012)

On the birational nature of lifting, Working Algebraic Geometry Seminar, Purdue University (Apr. 2012)

When is a variety a quotient of a smooth variety by a finite group?, Algebraic Geometry Seminar, Brown University (Dec. 2011)

When is a variety a quotient of a smooth variety by a finite group?, Algebraic Geometry Seminar, Ohio State University (Nov. 2011)

Chow quotients of toric varieties as moduli of stable log maps, Algebraic Geometry Seminar, Caltech (Oct. 2011)

Toric Stacks, Algebraic Geometry Seminar, Rice University (Sept. 2011)

Chow quotients of toric varieties as moduli of stable log maps, Representation Theory, Geometry and Combinatorics Joint Seminar, UC Berkeley (Apr. 2011)

Toric Artin Stacks, Geometry-Topology Seminar, University of Missouri (Feb. 2011)

Stacky Resolutions of Singular Schemes, Algebraic Geometry Seminar, University of Wisconsin (Nov. 2010)

Stacky Resolutions of Singular Schemes, Algebraic Geometry Seminar, University of Michigan (Jan. 2010)

Stacky Resolutions of Singular Schemes, Number Theory and Arithmetic Geometry Seminar, University of Illinois at Chicago (Oct. 2009)

Stacky Resolutions of Singular Schemes, Algebraic Geometry Seminar, University of Illinois at Urbana-Champaign (Oct. 2009)

SUPERVISION

Postdoctoral Fellows:

Brett Nasserden[3]	2021–23	
Daren Cheng[1]	2020–22	
Fei Hu	2019–20	Postdoc at University of Oslo
Andrew Staal[1]	2019–21	
Simon Crawford[2]	2018–20	Heilbronn Postdoc at Bristol
Ali Aleyasin[1]	2017–19	
Michael Bailey[1]	2017–18	
Ivan Kobyzev	2017	Machine Learning Researcher at RBC
Yoav Len	2016–18	Professor at St. Andrew's
Akos Nagy[1]	2016–17	Postdoc at Duke University
Yi Zhu[2]	2015–17	PNC

[1] jointly supervised with Geometry and Topology Group
[2] jointly supervised with Bell, McKinnon, and Moosa
[3] jointly supervised with Dhillon

Ph.D. Students:

Sean Monahan	2020–	
Nicole Kitt	2020–	
Yash Singh	2020–	
Brett Nasserden	2016–21	Soon to be Postdoc at University of Western

Masters Students:

Nicole Kitt	2019–20	PhD student at University of Waterloo
Sean Monahan	2019–20	PhD student at University of Waterloo
Jeffrey Samuelson	2018–19	
David Urbanik[3]	2017–18	PhD student at University of Toronto

[3] co-supervised with David Jao

NSERC Undergraduate Research Experiences and Hires:

Dongshu Dai	Spring 2021	
Spencer Whitehead	Winter 2021	Master's Student at Univ. of Tokyo
Rindra Razafy	Spring 2020	
Austin Sun	Spring 2020	Master's Student at Waterloo
Spencer Whitehead	Spring 2020	Master's Student at Univ. of Tokyo
Ron Meng	Spring 2019	Software Engineer at LinkedIn
Alexander Slamen	Spring 2019	Master's student at Toronto
Jiahui Huang	Winter 2019	Master's student at ETH
Clair Xinle Dai	Winter 2019	PhD student at Harvard
Rosie Wanchun Shen	Winter 2019	PhD student at Harvard
Stephen Wen	Spring 2018	PhD student at Waterloo
Akshay Tiwary	Winter 2018	PhD student at UCSD
Trevor Gunn	Spring 2017	PhD student at Georgia Tech
Xiaoyu Xie	Spring 2016	

Undergraduate Reading Courses:

Chenfangrui Wu	Fall 2017	
Raymond Cheng	Winter 2016	PhD student at Columbia University

CONFERENCE ORGANIZATION	Fields Medal Symposium, Organization Committee, Toronto (Oct. 2021)
	Combinatorial Algebraic Geometry (with Jenna Rajchgot), Session of the Canadian Mathematical Society, Toronto (Dec. 2019)
	Noncommutative Surfaces and Artin's Conjecture (with Jason Bell and Colin Ingalls), American Institute of Mathematics (Sept. 2019)
	Toric and Convex Geometry (with Greg Smith), Session of the Canadian Mathematical Society, Waterloo (Dec. 2017)
JOURNALS REFEREED	Acta Mathematica
	Advances in Mathematics
	Algebra & Number Theory
	Algebraic Geometry
	Arnold Mathematical Journal
	Bulletin of the London Mathematical Society
	Central European Journal of Mathematics
	Communications in Algebra
	Compositio Mathematica
	Crelle's Journal, Journal für die reine und angewandte Mathematik
	Duke Math Journal
	Geometry & Topology
	International Mathematics Research Notices
	Inventiones
	Journal of Algebra
	Journal of Algebraic Geometry

Journal of the American Mathematical Society

Journal of Commutative Algebra

Journal of the European Mathematical Society

Journal of Pure and Applied Algebra

Mathematical Research Letters

Mathematische Zeitschrift

Münster Journal of Mathematics

Proceedings of the American Mathematical Society

Publications mathématiques de l'IHÉS

Forum of Mathematics, Sigma

THESIS COMMITEES

Ph.D. Thesis Committees:

Ehsaan Hossain	University of Waterloo	May 2020
Cameron Marcott	University of Waterloo (Internal-External)	Aug. 2019
Nickolas Rollick	University of Waterloo	June 2019
Amir Nasr-Azadani	University of New Brunswick (External-External)	Dec. 2018
Tyrone Ghaswala	University of Waterloo	June 2017
Ivan Kobyzev	University of Western Ontario (External-External)	Aug. 2016

Masters Thesis Committees:

Xingchi Ruan	University of Waterloo	Aug. 2020
Andrej Vukovic	University of Waterloo	Aug. 2019
David Urbanik	University of Waterloo	Aug. 2018
Brandon Doherty	University of Waterloo	Aug. 2017
Anthony McCormick	University of Waterloo	July 2017
Dylan Butson	University of Waterloo	Sept. 2016
Nickolas Rollick	University of Waterloo	July 2016

TEACHING

Courses Taught at Waterloo:

PMATH 965: Deformation Theory with a Viewpoint Toward Moduli Spaces Enrolment: 11	Fall 2020
PMATH 764/464: Algebraic Geometry Enrolment: 26	Winter 2020
MATH 235: Linear Algebra 2 for Honors Mathematics Enrolment: two sections each 117	Fall 2019
PMATH 641/441: Algebraic Number Theory Enrolment: 16	Winter 2019
MATH 135: Algebra for Honors Mathematics Enrolment: 39	Winter 2019
PMATH 347: Groups and Rings Enrolment: 70	Fall 2018
MATH 135: Algebra for Honors Mathematics Enrolment: 41	Winter 2018

	PMATH 764/464: Algebraic Geometry Enrolment: 28	Spring 2017
	PMATH 347: Groups and Rings Enrolment: 59	Spring 2017
	PMATH 965: Toric Varieties Enrolment: 6	Winter 2017
	MATH 135: Algebra for Honors Mathematics Enrolment: 66	Winter 2017
	PMATH 764/464: Algebraic Geometry Enrolment: 17	Winter 2016
	MATH 235: Linear Algebra 2 for Honors Mathematics Enrolment: 105	Fall 2015
SERVICE	Coordinator for Chinese University of Hong Kong Summer Research Exchange Program	2019–21
	Math Faculty Graduate Council Representative	2019–22
	Graduate Committee	2017–22
	Wrote and graded Algebra Comprehensive Exam (with Ruxandra Moraru)	2020–21
	Algebra Seminar, co-organizer	2018–21
	Geometry and Topology Seminar, co-organizer	2015–21
	Meet the Profs Graduate Visitation Day	Winter 2021
	Oral Comprehensive Examiner for Ben Lovitz	Winter 2020
	Ran Learning Seminar on Arakelov Geometry	Winter 2020
	Course Coordinator for MATH 235	Fall 2019
	Graduate Admissions Subcommittee	2017–19
	Ran Learning Seminar on Valuative Trees	2019–20
	Engendering Resident Pathways and Communities Focus Group Participant	2018
	Ran Learning Seminar on work of Baker–DeMarco	2018–19
	Committee to select the Pure Math Chair	2017–18
	Math Faculty Representative to the Environment Faculty Council	2015–17
	Ran Hot Topics Seminar on Hodge Theory for Combinatorial Geometries	2016–17
	Oral Comprehensive Examiner for Nickolas Rollick	Winter 2015
	Undergraduate math club talk (PMC)	2015–16
	Hot Topics Seminar on Berkovich Spaces and Model Theory, co-organizer	2015–16
	Wrote and graded Algebra Comprehensive Exam (with Yu-Ru Liu)	2015–16
GRANT PANEL REVIEWER	Natural Sciences and Engineering Research Council Grant Reviewer, 2020	
	Natural Sciences and Engineering Research Council Grant Reviewer, 2019	

National Science Foundation Grant Panel Member, 2018

MEMBERSHIPS   Canadian Mathematical Society