

Alana Huszar

Curriculum Vitae

5080 East Hall
530 Church Street
Ann Arbor, MI 48109
☎ (908) 255 6344
✉ huszara@umich.edu

Education

- expected 2022 **Ph.D, Mathematics**, *University of Michigan*, Ann Arbor, MI, Advisor: Harm Derksen.
- 2019 **M.S, Mathematics**, *University of Michigan*, Ann Arbor, MI.
- 2016 **B.A, Mathematics**, *The College of New Jersey*, Ewing, NJ., Minor: Computer Science.
Thesis: Pointed Monoids and Extended Rational Polyhedral Cones
Advisor: Steffen Marcus

Papers

- in prep *Non-commutative Rank and Semi-stability of Quiver Representations*, with Harm Derksen.
- Unipancyclic Matroids*, with Will Agnew-Svoboda, Erin McNicholas, Jeff Schreiner-McGraw, Colin Starr, and Corrine Yap, *Discrete Mathematics*, Volume 342, Issue 8, 2019, Pages 2254-2269.
- Clutching and Gluing in Tropical and Logarithmic Geometry*, with Steffen Marcus and Martin Ulirsch, *Journal of Pure and Applied Algebra*, Volume 223, Issue 5, May 2019, Pages 2036-2061. ArXiv:1706.07554.
- 4-Equitable Tree Labelings*, with Zena Coles, Jared Miller, and Zsuzsanna Szaniszló, *Congressus Numerantium* Volume 228, 2017, pages 51-63.

Teaching

- Winter 2020 **Math for Elementary and Middle School Teachers - Math 489**, *University of Michigan*.
Graduate Student Instructor
- Fall 2019 **Calculus II - Math 116**, *University of Michigan*.
Student Course Co-Coordinator
- Summer 2019 **Graph Theory - MMSS Session 1**, *University of Michigan*.
Graduate Teaching Assistant
- Winter 2018 **Calculus II - Math 116**, *University of Michigan*.
Primary Instructor
- Fall 2017 **Calculus II - Math 116**, *University of Michigan*.
Primary Instructor
- Winter 2017 **Calculus II - Math 116**, *University of Michigan*.
Primary Instructor

Fall 2016 **Calculus I - Math 115**, University of Michigan.
Primary Instructor

Professional and Outreach

- 2020-2021 Co-chair, Math Department Student Advisory Committee, University of Michigan
- 2019-2021 Vice-President, University of Michigan AWM Chapter
 - 2018 GROW Conference Poster Session Organizer, University of Michigan
- 2018-2019 President, University of Michigan AWM Chapter
- Summer 2018 Math Advisor, University of Michigan School of Engineering
 - 2018 Panelist, *Graduate School Panel*, Women in Math, University of Michigan
 - 2018 University of Michigan Representative, JMM Graduate School Fair
- 2017-2018 Vice-President and Secretary, University of Michigan AWM Chapter
- Summer 2017 Graduate Assistant, Valparaiso Experience in Research by Undergraduate Mathematicians
 - 2017 Panelist, *Graduate School Panel*, Women in Math, University of Michigan
 - 2017 Panelist, *Graduate School Panel*, Math Club, The College of New Jersey
- 2017-2020 Member, Math Department Student Advisory Committee, University of Michigan
 - 2016 Guest Speaker, *Underrepresentation of Women in STEM*, PSYCH 401-009, University of Michigan
- 2016-2017 Secretary, University of Michigan AWM Chapter
 - 2016 Panelist, *Graduate School Panel*, Math Club, The College of New Jersey
- 2016-2021 Member, American Mathematical Society
- 2013-2021 Member, Association for Women in Mathematics

Talks

- 2021 *Invariants and Quivers*, GAUSS Seminar, University of Iowa, Virtual.
- 2021 *Invariant Polynomials and Quiver Representations*, Student Combinatorics Seminar, University of Michigan, Virtual.
- 2021 *Non-commutative Rank and Stability of Quiver Representations*, Joint Mathematics Meeting, Virtual.
- 2021 *Non-commutative Rank and the Null Cone*, MCAIM Student Seminar, University of Michigan, Virtual.
- 2020 *Polymatroids, Megamatroids, and Polytopes*, Student Combinatorics Seminar, University of Michigan, Virtual.
- 2020 *Non-commutative Rank and Stability of Quiver Representations*, AMS Spring Southeastern Sectional Meeting, University of Virginia, Charlottesville, VA. Cancelled due to COVID-19.
- 2019 *Matroids: Part I*, Student Combinatorics Seminar, Ann Arbor, MI.

- 2019 *Weighted Bipartite Matching*, Student Combinatorics Seminar, Ann Arbor, MI.
- 2018 *Quiver Representations*, Student Combinatorics Seminar, Ann Arbor, MI.
- 2018 *Invariant Theory*, GROW Conference Poster Session, Ann Arbor, MI.
- 2018 *Matroids: Pre-talk*, Macaulay2 Mini-course, Ann Arbor, MI.
- 2017 *Matroids*, Student Combinatorics Seminar, Ann Arbor, MI.
- 2017 *Extended Cones and Pointed Monoids*, VERUM 2017 Invited Lecture, Valparaiso University, Valparaiso, IN.
- 2017 *4-Equitable Tree Labelings*, 48th Southeastern International Conference on Combinatorics, Graph Theory & Computing, Florida Atlantic University, Boca Raton, FL.
- 2016 *Extended Rational Polyhedral Cones*, Student Combinatorics Seminar, Ann Arbor, MI.
- 2016 *Boardnames*, PCMI Undergraduate Summer School Presentations, Midway, UT.
- 2016 *Pointed Monoids and Extended Rational Polyhedral Cones*, Honors Thesis Presentation, The College of New Jersey, Ewing, NJ.

Conferences and Workshops

- 2021 *Joint Mathematics Meeting*, Virtual.
- 2019 *Seventh Conference on Geometric Methods in Representation Theory*, University of Missouri, Columbia, MO.
- 2019 *Homological Methods and Tilting Theory of Finite Dimensional Algebras*, University of Iowa, Iowa City, IA.
- 2018 *Sixth Conference on Geometric Methods in Representation Theory*, University of Iowa, Iowa City, IA.
- 2018 *Graduate Research Opportunities for Women Conference*, University of Michigan, Ann Arbor, MI.
- 2018 *AMS Fall Central Sectional Meeting*, University of Michigan, Ann Arbor, MI.
- 2018 *Optimization, Complexity and Invariant Theory*, Institute for Advanced Study, Princeton, NJ.
- 2018 *4th Annual Graduate Student Conference in Algebra, Geometry, and Topology*, Temple University, Philadelphia, PA.
- 2018 *Women and Mathematics: Mathematics of Modern Cryptography*, Institute for Advanced Study, Princeton, NJ.
- 2018 *Midwest Women in Mathematics Symposium*, Purdue University, West Lafayette, IN.
- 2018 *Joint Mathematics Meeting*, San Diego, CA.
- 2017 *Indiana Undergraduate Research Conference*, Purdue University, West Lafayette, IN.
- 2017 *48th Southeastern International Conference on Combinatorics, Graph Theory & Computing*, Florida Atlantic University, Boca Raton, FL.

- 2016 *Cycles on Moduli Spaces, Geometric Invariant Theory, and Dynamics*, ICERM, Providence, RI.
- 2016 *PCMI Summer Session: The Mathematics of Data*, IAS/Park City Math Institute, Midway, UT.
- 2016 *Women and Mathematics: Curves, Loops, and Words in Geometry*, Institute for Advanced Study, Princeton, NJ.
- 2016 *New Jersey Undergraduate Mathematics Conference*, William Patterson University, Wayne, NJ.
- 2016 *Algebraic Geometry North Eastern Series*, Yale University, New Haven, CT.
- 2016 *Joint Mathematics Meeting*, Seattle, WA.
- 2015 *Women and Mathematics: Algebraic Geometry*, Institute for Advanced Study, Princeton, NJ.

Fellowships and Awards

- 2020 **The Karen Rhea Excellence in Teaching Award**, University of Michigan
- 2020 **G. Cleaves Byers Collegiate Math Education Award**, University of Michigan
- 2018 **2018 National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) Fellowship**, National Science Foundation
- 2017 **2018 Women and Math Graduate Ambassadorship**, Institute for Advanced Study and Lisa Simonyi
- 2017 **Alice Webber Glover in Math Scholarship**, University of Michigan
- 2016-2019 **Michigan Mathematics Graduate Fellowship**, University of Michigan
- 2016-2019 **Graduate Student Instructorship**, University of Michigan
- 2016 **Wendall B. Secor Award for Excellence in Mathematics**, The College of New Jersey
- 2016 **Goldstein Abstract Algebra Award for Superior Achievement in Abstract Algebra**, The College of New Jersey
- 2015 **Goldwater Scholarship**, Barry Goldwater Scholarship and Excellence in Education Program
- 2015 **Robert S. Duncan Memorial Award for Excellence in Mathematics**, The College of New Jersey
- 2015 **Phi Beta Kappa**, The College of New Jersey