

Taylor Brysiewicz

Mathematics
Texas A&M University

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EDUCATION

- 2014–present **PhD, Mathematics**, Texas A&M University, USA.
2010–2014 **BS, Mathematics**, Northern Illinois University, USA.
- Major in Mathematics, Minor in Philosophy.

PUBLICATIONS

- 2017 *The degree of $SO(n)$* . Brandt, M., Bruce, D., Brysiewicz, T., Krone, R., Robeva, E. to appear in the Fields 2016 CAG book, ArXiv.org/1701.03200, 2016
2014 *Families of Plane Cubic Curves with Nine-Pointic Contact at a Point*. Balay-Wilson, L., Brysiewicz T., Volume 15, No. 1, Spring 2014. <http://www.rose-hulman.edu/mathjournal/archives/2014/vol15-n1/paper1/v15n1-1pd.pdf>

PRESENTATIONS

- 2017 *Counting Interpolants with Necklaces*. Graduate Students Seminar. Texas A&M University. April 28, 2017.
2017 *Newton Polytopes: What are they and how do we compute them?* Graduate Students Seminar. Texas A&M University. February 16, 2017.
2017 *The Degree of $SO(n)$* Geometry Seminar. Texas A&M University. January 27, 2017.
2016 *Newton Polytopes via Numerical Algebraic Geometry*. Algebraic Geometry Seminar. Technische Universität Berlin. October 26, 2016.
2016 *Newton Polytopes via Numerical Algebraic Geometry*. AMS Sectional. University of Denver. October 8, 2016.
2016 *Numerically Computing Newton Polytopes (Poster)*. Introductory Workshop. Fields Institute. August 16, 2016.
2015 *Newton Polytopes via Numerical Algebraic Geometry*. Graduate Algebra Symposium. University of Texas Arlington. November 14, 2015.
2015 *Osculating Conics and Cubics*. Graduate Students Seminar. Texas A&M University. April 16, 2015
2014 *Computing Osculating Conics and Cubics* 31st Annual Rose-Hulman Institute of Technology Undergraduate Mathematics Conference. “Best Talk” Session. April 11-12, 2014.
2014 *Points of Ninth Order on a Cubic Curve (Poster)* Southwest Local Algebra Meetings, Texas A&M University, March 1, 2014.
2014 *Families of Plane Cubic Curves with Nine-Pointic Contact at a Point* AMS Session on Undergraduate Research in Algebra, Combinatorics and Number Theory, Joint Mathematics Meetings, January 17, 2014.
2013 *Osculating Cubics and Cubics that Intersect Once* Algebra Seminar, Northern Illinois University, November 26, 2013.
2013 *Osculating Conics of Plane Curves in Projective Space* Algebra Seminar, Northern Illinois University, November 19, 2013.
2013 *Littlewood Polynomials and Their Roots* Complex Analysis Seminar, Northern Illinois University, April 24, 2013.

CONFERENCES AND WORKSHOPS

- 2017 SIAM Conference on Applied Algebraic Geometry. Georgia Institute of Technology. Atlanta, GA. July 31 - Aug 4
2017 Texas Algebraic Geometry Symposium. Rice University. Houston, TX. April 21-23
2016 Major Thematic Program on Combinatorial Algebraic Geometry. Fields Institute. Toronto, Canada. Nov 8-Dec 10
2016 AMS Sectional Meeting. University of Denver. Denver, CO. Oct 8-9

- 2016 Major Thematic Program on Combinatorial Algebraic Geometry. Fields Institute. Toronto, Canada. Aug 10-Oct 8
- 2016 Graduate Summer School in Combinatorial Algebraic Geometry. Fields Institute. Toronto, Canada. July 18-22
- 2016 Summer School on Real Algebraic Geometry and Optimization. Georgia Tech. Atlanta, GA. July 11-15
- 2016 Workshop on Software and Applications of Numerical Algebraic Geometry. University of Notre Dame. South Bend, IN. May 23-25
- 2016 Macaulay2 Workshop. University of Utah. Salt Lake City, UT. May 7-10.
- 2016 Texas Algebraic Geometry Symposium. University of Texas, Austin. Austin, TX. April 2-3
- 2016 Southwest Local Algebra Meeting. Texas State University. San Marcos, TX. February 27-28
- 2015 Graduate Algebra Symposium. University of Texas Arlington. Arlington, TX. November 14.
- 2015 Macaulay2 Workshop. Boise State University. Boise, ID. May 27-30.
- 2015 Texas Algebraic Geometry Symposium. Texas A&M University. College Station, TX. April 10-12.
- 2015 Texas Geometry and Topology Conference. University of Houston. Houston, TX. February 27-March 1
- 2015 Joint Mathematics Meetings. San Antonio, TX. January 10-13.
- 2014 31st Annual Rose-Hulman Institute of Technology Undergraduate Mathematics Conference. April 11-12.
- 2014 Annual meeting of the Illinois Section of the Mathematical Association of America. Southern Illinois University Edwardsville. Edwardsville, IL. March 28-29.
- 2014 Southwest Local Algebra Meetings, Texas A&M University. College Station TX. March 1-2.
- 2014 Joint Mathematics Meetings. Baltimore, MD. January 15-18.
- 2013 AMS Fall Central Sectional Meeting. Washington University. St. Louis, MO. October 18-20.

AWARDS

- 2014 Northern Illinois University's Department of Mathematical Sciences Chairman's Award
- 2014 1st Place in Northern Illinois University's Undergraduate Mathematics Contest
- 2011,2012,2013 Putnam Contest Team Member (Highest Score: 20)
- 2013 2nd Place in Northern Illinois University's Undergraduate Mathematics Contest
- 2011 3rd Place in Northern Illinois University's Undergraduate Mathematics Contest

SERVICE

- 2016-2017 **Social Coordinator**, *AMS Student Chapter*.
- 2017 **Co-Organizer with Timo de Wolff**, *Junior Geometry Seminar. Texas A&M University*.
- 2016 **Co-Founder with Timo de Wolff, Co-Organizer with Timo de Wolff, Kevin Kordek, Ola Sobieska**, *Student Working Seminar in Algebra and Geometry. Texas A&M University*.
- 2016 **Co-Founder/Organizer with Timo de Wolff**, *Junior Geometry Seminar. Texas A&M University*.
- 2015 **Helper**, *Pi Day of the Century. Texas A&M University*.
- 2014 **Grader**, *Northern Illinois University High School Mathematics Contest*.
- 2013-2014 **President of the NIU Math Club**, *Northern Illinois University*.

TEACHING

- Spring 2017 **MATLAB Instructor**, *Math 152*.
- Spring 2017 **Help Session**, *Linear Algebra Courses*.
- Spring 2016 **Help Session**, *Linear Algebra Courses*.
- Fall 2015 **Recitations**, *Math 151. Calculus I for Engineers*.
- Summer 2015 **Help Session**, *Linear Algebra Courses*.
- Spring 2015 **Help Session**, *Linear Algebra Courses*.
- Fall 2014 **Grader**, *Foundations of Mathematics*.
- 2013-2014 **Tutor**, *Club Z! Tutoring Company*.
- Tutoring Calculus and ACT Prep
- 2010-2011 **Tutor**, *The Tutoring Club*.
- Tutoring Calculus, Geometry, Algebra, and ACT Prep

COMPUTER EXPERIENCE

OS Linux, Windows

Mathematical Software GAP, Singular, Macaulay2, Maxima, SAGE, L^AT_EX, MATLAB, Bertini, alphaCertify, PHCpack