Claudia He Yun

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Brown University
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EDUCATION

Brown University, Providence, RI
M.Sc in Mathematics received May 2019. Ph.D. candidate in Mathematics.
Sep 2017 - present
Smith College, Northampton, MA
B.A. *magna cum laude* Mathematics. Phi Beta Kappa.   GPA: 3.96
Minor: Physics
Sep 2013 - May 2017
Dean's List 2013-2015, 2016-2017

Budapest Semesters in Mathematics, Budapest, Hungary
Sep 2015 - Dec 2015   GPA: 3.8

PUBLICATIONS

1. *The S_n-equivariant rational homology of the tropical moduli spacse $\Delta_{2,n}$*, Claudia He Yun (submitted)
2. *Puzzling and Apuzzling Graphs*, D. Gold, J. Henle, C. Huang, T. Lyve, T. Marin, J. Osorio, M. Puligandla, B. Weick, J. Xia, **H. Yun**, and J. Zhang, AKCE International Journal of Graphs and Combinatorics, vol. 13, no. 1 (2016): 1-10.

   In preparation:

3. *Splines on lattices and the equivariant cohomology of homogenous affine springer fibers of weight 1*, J. Tymoczko and C.H. Yun

HONORS & AWARDS

Ann Kirsten Pokora Prize to a senior with a distinguished academic record in mathematics, Smith College, 2017
Top 500: William Lowell Putnam Mathematical Competition, 2017
Suzan Rose Benedict Prize to a Sophomore for Excellence in Mathematics, Smith College, 2015
Summer Research Fellowship, Smith College, 2014-2016
Wallfisch Performance Prize (Piano), Smith College, 2016
Susan Rose Internships in Music, Smith College, 2015

TALKS

[May 2020] *Rational homology of the tropical moduli spaces $\Delta_{2,n}$ as S_n-representations*, Marvelous Algebraic Geometry Unraveled by Students (MAGUS), online
[Mar 2020] *S_n-equivariant homology of the tropical moduli space $\Delta_{2,n}$*, Combinatorics Seminar, Brown University
[Feb 2020] *S_n-equivariant homology of the tropical moduli space $\Delta_{2,n}$*, Graduate Student Seminar, Brown University
[Oct 2019] *What is representation stability?*, Graduate Student Seminar, Brown University
[Apr 2018] *Tree representation of S_{n+1}*, Graduate Student Seminar, Brown University
[Oct 2018] *Introduction to Schubert Calculus*, Graduate Student Seminar, Brown University
[Apr 2017] Poster: *Splines on Lattices*, Celebrating Collaborations, Smith College
[Apr 2017] *Splines on Lattices*, 24th Hudson River Undergraduate Mathematics Conference (HRUMC), Westfield State University
[Jan 2017] *An Introduction to Splines*, the Joint Math Meetings, Atlanta, GA
[Dec 2016] *Splines on Cycles and Infinite Graphs*, Math Lunch Talk, Smith College
[Sep 2016] *Basis of Splines on the A_n Root Lattice*, Women in Mathematics in New England (WIMIN) 2016, Smith College
[Jul 2016] *Basis of Splines on the An Root Lattice*, Williams REU conference, Williams College
[Jul 2016] Poster: *Number of Positive Root in a Subspace of the A_n lattice*, Summer Combo in Vermont, St Michael's College
[Apr 2016] *Generalized Splines on Cycles and Infinite Graphs*, Math Lunch Talk, Smith College

[Apr 2016] *Generalized splines on cycles and infinite graphs*, 23nd Hudson River Undergraduate Mathematics Conference (HRUMC), St Michael's College

[Sep 2014] *Puzzling and Apuzzling Graphs*, Women in Mathematics in New England (WIMIN) 2014, Smith College

[Apr 2014] *Puzzling and Apuzzling Graphs*, 21st Hudson River Undergraduate Mathematics Conference (HRUMC), Skidmore College

[Mar 2014] *Puzzling and Apuzzling Graphs*, 5th Annual AEMES Research Symposium, Smith College

* scheduled.

TEACHING EXPERIENCE

Brown University

- Teaching assistant. Math 520: Linear Algebra. Fall 2020.
- Instructor. Math 100: Calculus II. Fall 2019.
- Teaching assistant. Math 90: Calculus I. Spring 2019.
- Teaching assistant. Math 100: Calculus II. Fall 2018.

Smith College

- General math tutor. Pre-calculus to multivariable calculus and linear algebra. Fall 2016 – Spring 2017.
- Instructor. One-week introduction to Java programming. January 2017.
- Computer science tutor. Data structures. Fall 2016.
- General physics tutor. Introductory physics courses. Fall 2014 – Spring 2016.

OUTREACH

Math Circle   Spring 2019 – present
                                                        Providence, RI

- We organize weekly trips to a local middle school and a local high school to teach math through activities and games.
- We also organize public math circles open to everyone in the community.

Summer Science Program   Summer 2018
                                                        Soccoro, NM

- This astrophysics program is aimed at advanced high school students.
- I worked as a TA to assist learning in math, physics, astronomy, and computer science.

SKILLS

Languages: Chinese (Native): fluent in speaking, reading, and writing
Computer Proficiency: Python, Java, SageMath, SQL, Mathematica, MatLab, SolidWorks, LaTeX.

SERVICE

Diversity/Inclusion Committee (Fall 2018 - present)

EXTRA-CURRICULAR ACTIVITIES

I play classical piano in my free time.
I also enjoy various sports, like rock climbing, aerial circus, and figure skating.
Treasurer, Astronomy and Physics Club (Sep 2013-May 2015)
The Bearded Ladies - a recreational circus club (Sep 2014-May 2015)
Smith College Glee Club (Sep 2014 - Jan 2015)
Safe Passage - a Northampton-based domestic violence service (Jan 2014-June 2014)
Smith College Chorus (Sep 2013- May 2014)